SEX BIAS IN MANAGEMENT EVALUATION

BY

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SEX BIAS IN MANAGEMENT EVALUATION

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The present study investigated several of the variables theorized to play a role in management evaluation. Specifically, the effects of the sex of the manager, the amount of information given to the evaluator, the level of performance or qualification of the manager, the sex of the evaluator, the evaluator's attitude toward women as managers, and the evaluator's occupational level on evaluations of managers were investigated.

Bank managers (N=166) and undergraduate students (N=240) read a packet of materials about a bogus manager applying for a promotion. The manager was described as either male or female with one of three types of job descriptions that varied in the amount of information and the level of performance (no evaluation, excellent evaluation, and poor evaluation). The subjects rated the applicant on a variety of dimensions such as ability, knowledge of occupational area, and interest in position. They also made attributions of the cause of the performance by rating the importance of ability, effort, luck, and the nature of the job to the applicant's performance as manager. Finally, the

subjects completed a questionnaire that assessed their attitudes toward women as managers.

Analysis of the results indicated that evaluations of the applicants were affected primarily by the level of information. The sex of the applicant and the sex of the evaluator had little effect on the evaluations made by the management sample but had some effect on the evaluations made by the student sample, thus indicating population differences. The students also evaluated all the applicants more favorably than did the managers. The attitudes of the subjects toward women as managers were related minimally to the evaluations.

The attribution of causes was examined to determine if the pattern of the attributions followed sex-role expectations. The male managers, in particular, attributed the applicant's performance to causes that were consistent with sex-role expectations. Both the male and the female students also showed evidence of attributing causes according to sex-role expectations. The attributions by the female managers were not related to sex-role expectations.

CHAPTER 1
INTRODUCTION

Bookstores stock a plethora of books for women who aspire to be managers. The majority of these books are self-help guides for the potential female executive (e.g., Boss Lady by Foxworth, 1979; The New Executive Woman: A Guide to Business Success by Williams, 1978; and The Woman's Guide to Management: How to Get to the Top and Stay There by Lynch, 1978). In addition, magazines and journals publish similar articles for aspiring women managers (e.g., Moore, 1979; White, 1981). The common theme running throughout these books and articles is that women must change. If they are interested in moving into management, women must take more risks, show more self-confidence, and be more assertive than they normally are.

This self-improvement approach to increasing the number of women in management is based on the assumption that women themselves are the cause of their few numbers. Following this line of thought, the barriers erected against women entering management positions are found within the women themselves. The women's own attitudes, motivation, or past socialization serve as barriers to managerial advancement. For example, in the socialization process women learn to perceive risk as only a potential loss, while men view risk as an opportunity for either success or failure (Hennig & Jardim, 1976). Because of their perception of risk, women may be less willing to take the risks necessary to succeed in management. An example of a motivation

barrier is Horner's motive to avoid success (1969). She suggests that women fear success because of the incompatibility between achievement and a sense of femininity. When women fear success, they are not likely to seek managerial positions.

An alternative explanation for the small number of women managers is the barriers found in the situation or environment. The structure of the organization itself or the attitudes of peers and superiors can serve as external barriers to managerial advancement. Organizational structure and the distribution of opportunity and power within the organization can affect how many women reach and succeed in management. Often women's opportunities are blocked and they have little organizational power (Kanter, 1977). The attitudes of the people in the organization can also impede women's advancement. For example, if women are seen as not having the ability needed for management, then they are less likely to be chosen as managers. When women do become successful managers, their success may be viewed as the result of luck or effort rather than ability.

Hennig and Jardim (1976) propose that external barriers are even more important than internal ones for women because "if one is not 'seen' by others as the kind of person who should have a particular job all the competence in the world would not get it for them" (p. 26). Even if women behaved exactly as the books and the articles suggest, the external barriers would still be there. The external barriers affect the way women are perceived and treated regardless of their individual behavior. Two specific ways in which external barriers affect perceptions are 1) through evaluations of managerial performance, and 2) through causal attribution of performance.

Evaluations of Managerial Performance

The influence of environmental barriers on evaluations of performance has generated a great deal of interest among researchers, but the findings have been inconclusive and conflicting. Some authors have found that men are given more favorable evaluations than women (e.g., Heneman, 1977; Rosen & Jerdee, 1974b); others have found that women received more favorable evaluations than men for the same performance (e.g., Abramson, Goldberg, Greenberg, & Abramson, 1977; Jacobson & Effertz, 1974); and still other researchers have found no sex differences in evaluations (e.g., Brief & Wallace, 1976; Hall & Hall, 1976).

In a review of the literature Nieva and Gutek (1980) proposed three factors to explain the conflicting research on performance evaluation. One factor is the required level of inference which refers to how much information subjects are given and how much they must infer. For example, Rosen and Jerdee (1974b) found male job applicants were evaluated more positively than female job applicants when only minimal information about the applicants was given, while Hall and Hall (1976) found no sex differences in the evaluation of male and female managers when an actual performance sample was given to the subjects. Kiesler (1975) suggests that any additional information given to the evaluators must be relevant to the performance because additional irrelevant information exaggerated the tendency to use stereotypes.

The second factor offered by Nieva and Gutek is the level of qualification or performance which refers to whether the situation to be evaluated is a successful one or not. Abramson et al. (1977), Bigoness (1976), and Hammer, Kim, Baird, and Bigoness (1974) found

that in a successful situation women were evaluated more positively than men. Jacobson and Effertz (1974) found that female leaders, in a failure situation, were not evaluated as harshly as male leaders while as followers the females were evaluated more critically than the male followers. Abramson et al. (1977) refer to their findings as the "talking platypus phenomenon." Women are rated more positively than men for the same level of successful performance because "it matters little what the platypus says, the wonder is that it can say anything at all" (p. 123).

The third factor, level of sex-role congruence, was proposed after Nieva and Gutek noticed that studies using jobs that were sex-incongruent for women (such as lawyer or manager) were more likely to have sex differences in evaluation than studies using sex-congruent jobs (such as library administrator). For example, research by Cash, Gillen, and Burns (1977) and Cohen and Bunker (1975) found sex differences in evaluations of males and females using sex-incongruent positions while Brief and Wallace (1976) found no sex differences in evaluations with a sex-congruent position.

A fourth variable that should be considered when attempting to explain the conflicting research findings in the area of prejudicial evaluations is the type of subject population. Inderlied and Powell (1979) found that students had a more stereotypic view of manager and leader behavior than managers did. Butterfield and Bartol (1977) and Gross and Geffner (1980) also found differences between student and non-student populations. Other research has not found differences between student and professional populations (Brief & Wallace, 1976; Dipboye, Fromkin, & Wiback, 1975; Rosen & Jerdee, 1973). Further research is needed before the exact influence of the subject population is known.

In fact, more examination into each of the variables discussed above is needed. Nieva and Gutek (1980) made their conclusions after reviewing the research and comparing one study against another. Deciding that a particular study is support for what factor is difficult because most studies confound at least two variables. For example, the study by Jacobson and Effertz (1974) could be used as support for either the level of qualification factor (they used a failure situation) or the sex-role congruence factor (the job of leader is congruent for males and incongruent for females). Hall and Hall's (1976) failure to find sex differences could be attributed to either the level of required inference factor (they used an actual performance sample) or to the sex-role congruence factor (the position of personnel manager may be congruent for females and for males). No research project has examined the influence of each of the four factors independently. The present study investigated three of the factors: the required level of inference, the level of qualification, and the type of subject population. The other factor, level of sex-role congruence, offered by Nieva and Gutek (1980) was not manipulated. Instead, since only 25% of managers are women (Women's Bureau, Note 1), sex-role incongruence for women was assumed.

Perceived Causes of Performance

Environmental barriers affect not only the process of evaluation, but also the perceived cause of performance. The attribution of causality indicates whether the evaluator believes that the performance of a manager is an accidental occurrence or is likely to be repeated in the future. For example, if a woman's managerial behavior is attributed

to luck, then she is not as likely to receive a promotion than if her behavior had been attributed to ability (Heilman & Guzzo, 1978). Research in this area is based on the four causes found in attribution theory: ability, effort, luck, and nature of task (Weiner, Freize, Kikla, Reed, Rest, & Rosenbaum, 1971). The results indicate that males' performance on male-related tasks is attributed to stable factors, such as ability, while females' performance is attributed to external or temporary causes, such as luck and effort (Deaux & Emswiller, 1974; Feldman-Summers & Kiesler, 1974; Lips & Myers, 1980).

Garland and Price (1977) concluded that attribution of causality is more complicated than generally thought. They found causal attribution of a successful female manager varied with the subjects' attitudes toward women as managers. Those subjects with positive attitudes attributed the success to internal factors (ability and effort) while those with less positive attitudes attributed the success to external factors (luck and easy job). These results were replicated by Stevens and DeNisi (1980) who also found differences in the attribution of failure. Male subjects with favorable attitudes attributed the failure of a female manager to external causes while male subjects with unfavorable attitudes attributed the failure to internal causes.

Because further investigation of the relationship of attribution of causality and attitudes toward women in management is needed, this study examines both variables. In addition, the relationship of causal attribution and the three variables previously mentioned (required level of inference, level of qualification, and type of subject population) is also investigated. The effect of these variables upon attribution has not been previously studied.

Operationalization and Hypotheses

This study examines the effect of six variables, 1) sex of manager being evaluated, 2) amount of information, 3) level of performance or qualification, 4) type of subject population, 5) sex of subject, and 6) attitudes toward women as managers, on the performance evaluation of a manager.

These relationships are investigated by presenting two subject populations, bank managers and undergraduate students, an application for promotion for a bogus male or female bank manager and a present job description with either an excellent performance rating, a poor performance rating, or no rating at all. The subjects are asked to give their perceptions of the applicant, to make causal attributions of the applicant's performance, and to complete a questionnaire examining their attitudes toward women as managers.

The following hypotheses are tested:

1. The amount of information, the level of performance, and the sex of the stimulus person interact to affect the perception of the applicant. Specifically, males are evaluated more positively when performance on a masculine job or task is unknown, and females are evaluated more positively than males when the success or failure of the performance is known.

2. Expectations of behavior that are based on the sex of the stimulus person and the level of performance affect causal attribution with expected behavior being attributed to stable causes and unexpected behavior being attributed to variable causes. In particular, the success of a female manager is attributed to effort while the

success of a male manager is attributed to ability. A female manager's failure is attributed to lack of ability, and a male manager's is attributed to lack of effort or bad luck.

3. Attitudes toward women managers affect how causal attribution of performance is made. Persons with favorable attitudes toward women managers attribute a woman's success to internal factors (effort and ability) while persons with less positive attitudes attribute success to external factors (luck and nature of job).

4. Male and female subjects similarly evaluate stimulus persons.

5. The sex of the stimulus person or evaluatee affects the evaluations made by the student population more than the management population.

CHAPTER 2
REVIEW OF LITERATURE

This chapter reviews the literature in three areas: sex effects on performance evaluation, sex effects on causal attribution, and the Women As Managers Scale.

Sex Effects on Performance Evaluation

Research in the area of sex bias in evaluation generally tests the hypothesis that, given identical qualifications or performance, men are evaluated more favorably than women. The results of the research do not conclusively support this hypothesis. As was stated in Chapter 1, some studies have found males evaluated more positively than females (Gutek & Stevens, 1979; Haefer, 1977a; Rosen & Jerdee, 1974b), others have found females evaluated more positively than males (Abramson et al., 1977; Bigoness, 1976; Hamner et al., 1974; Jacobson & Effertz, 1974), while still others reported no sex differences in evaluation (Frank & Drucker, 1977; Hall & Hall, 1976; Taynor & Deaux, 1973). All of this conflicting research suggests a much more complicated process than has been generally thought.

Nieva and Gutek (1980), after reviewing the literature in the area, developed several hypotheses as to why research has not consistently supported the commonly held notion that men are more positively evaluated for the same performance than women. Each of their hypotheses (required level of inference, level of qualification or

performance, and sex-role congruence), as well as one that was not proposed by them but is also relevant (evaluator characteristics), will be discussed in subsequent sections.

Required Level of Inference

Nieva and Gutek (1980) proposed that differences in research results can be explained partially by the amount of information about the stimulus person that is given to the subjects. They concluded that greater bias is found in studies that give little information about the stimulus person than in studies where more information is presented. When subjects must infer a great deal, they tend to rely upon stereotypes.

Examination of the research in the area supports their conclusion. The research studies that have found males to be evaluated more positively than females for the same performance tended to give the subjects minimal information on which to base their evaluations. For example, Rosen and Jerdee (1974b) gave undergraduate business students short application forms of either males or females who were to be considered for four different positions that were presented as either "demanding" or "routine." With this small amount of information to evaluate the applicants, the subjects evaluated the male applicants more favorably and chose the males more often than they did the female applicants. The poorest evaluations were given to the female applicants for the demanding jobs.

In another study, Rosen and Jerdee (1974a) had male bank supervisors participate in an in-basket exercise to test the effect of gender on a number of personnel decisions. An in-basket exercise

requires subjects to assume a certain role (in this study, personnel director) and react to a number of memorandums and letters. In this particular exercise the subjects were given some minimal information about four different situations with a personnel problem and were asked to make recommendations. The four personnel decisions were: recommendation for promotion to branch manager, choice of employee to attend a conference, solution of supervisory problem, and approval of a request for leave of absence. The sex of the person involved in each situation was varied. In the individual personnel decisions, the sex of the stimulus person had an effect. Males were promoted more often than females, especially for complex jobs. Young, promotable males were chosen overwhelmingly more often than older, unpromotable females to attend a conference, while younger, promotable females were chosen slightly more often than older, unpromotable males. The sex of the stimulus person affected how the subjects handled a supervisor's recommendation for solving a problem with a subordinate. Subjects were more willing to terminate the subordinate at the male supervisor's request than they were for the female supervisor, while more often transferring the subordinate of the female supervisor. When asked to approve a leave request of an employee for child care, subjects granted the leave to the female more than to the male. In summary, the subjects based their decisions on minimal information about the individuals involved and used the gender of the individuals in their decisions.

A study by Heneman (1977) also supports the contention that sex bias is found in studies presenting little data on which to base evaluations. He had undergraduate business students evaluate an applicant for the job of life insurance agent on the basis of a job description,

an applicant information form, and the test score of a test that supposedly was a selection device for new agents. The applicants were presented as either male or female with high, medium, or low test scores. The results showed that high scoring males were seen as more suitable for the position than high scoring females. There were no differences in suitability for the medium and low scoring applicants by sex. Heneman suggested that the addition of the test score to the application did not give any actual performance information and subjects were still required to infer a great deal, thus causing the sex effect.

Similar research findings to those of Rosen and Jerdee (1974a, 1974b) and Heneman (1977) have been found by Dipboye, Arvey, and Terpstra (1977), Haefer (1977a), Rosen, Jerdee, and Prestwich (1975), and Shaw (1974). All of these studies gave the subjects minimal information in the form of a resume and found males evaluated more positively than females.

Based on the hypothesis that little information results in inference about people usually from stereotypes, studies that give performance information should be less susceptible to sex effects. In fact, research by Frank and Drucker (1977), Hall and Hall (1976), and Terborg and Ilgen (1975) support this conclusion.

Frank and Drucker (1977) trained undergraduate students in how to evaluate four managerial skills (sensitivity, organizing and planning, decision-making, and written communication) from the responses to an in-basket exercise. After training, the subjects evaluated a bogus person's (presented as either male or female) responses to the exericse. The evaluations showed no influence by the

sex of the bogus person. According to Frank and Drucker, the abundance of performance information available to the subjects made the gender of the evaluatee a minor factor in the evaluations, thus causing the lack of sex effect.

Hall and Hall (1976) agree that actual performance information can eliminate sex differences in evaluation. They gave undergraduate business students a case study of a personnel director which included demographic information about the director and an actual problem situation with how the director handled the situation. The personnel director was presented as either male or female and black or white, or unspecified as to sex and race. The subjects were asked to evaluate the behavior of the personnel director as to ability to perform the job, job motivation, and overall task performance. The results showed no effect by sex or race. Hall and Hall (1976) suggested that the presence of performance information explains the difference between the findings and those of Rosen and Jerdee (1974a) and others finding sex effects.

Terborg and Ilgen (1975) also found no sex effects in the evaluation of an employee. They gave undergraduate business students an in-basket exercise that required them to take the role of a "unit supervisor" and make a number of management decisions over a compressed period of time. The subjects were first given information on the company and their responsibilities as a "unit supervisor." They were then asked to recommend the hiring of a new subordinate based on the resumes of four applicants and to suggest a starting salary from a range of possible salaries. After a period of time they were told who was hired (either a male or a female), and were given performance

information about the focal person and the other members of the work group. They were then asked to make work assignments, to suggest raises and bonuses, and to choose an employee for a training program. Although some sex effects were found for the applicants (females were offered lower starting salaries and were more often assigned routine rather than challenging jobs than were men), the majority of the dependent variables showed no sex effects especially after the performance information about the focal person was given. There were no sex differences in bonus money, overall performance, promotability, percent raise, or selection for a training program.

In each of the studies just discussed, all of the subjects in a particular study were given the same amount of information to evaluate the stimulus person. There has been one study in this area that manipulated the amount of information and required inference. Pheterson, Kiesler, and Goldberg (1971) gave half of their subjects information on the quality of performance and half none. They had undergraduate women evaluate paintings that were presented as either being done by male or female artists and also as either an entry or a winner in an art show. The entry condition, where the quality of performance was unknown, required more inference by the subjects than did the winning condition where the quality of performance was known. The subjects rated the painting by men more favorably than the paintings by women in the entry condition but rated them equally in the winning condition. One can conclude that performance information produced differential results in evaluation. When quality of work is unknown, subjects seem to rely on stereotypes in making evaluations and so assume males are better artists than women.

The research that has just been discussed (Frank & Drucker, 1977; Hall & Hall, 1976; Terborg & Ilgen, 1975; and Pheterson, Kiesler, & Goldberg, 1971) indicate that sex differences in evaluation are not found when actual performance information is given to the evaluators. Other research, though, suggests a different type of sex effect when more information, particularly concerning the quality of the performance, is presented. While males are evaluated more positively than females when little information is known, females seem to be more positively evaluated than males when actual performance data are given. In fact, Pheterson, Kiesler, and Goldberg (1971) suggest this direction in their study when they found females tending to be more positively evaluated than males in the winning condition even though the difference was not statistically significant. Research supporting this hypothesis is discussed in the next section.

Level of Qualification or Performance

Nieva and Gutek (1980) suggest that the level of qualification or performance of a stimulus person is another variable that can explain the conflicting research in the area of sex effects on evaluation. Several studies have manipulated competency to examine its effect on evaluations, and, interestingly, many of the studies found women being evaluated more positively than men when both are competent. This finding is contrary to other research showing that men are evaluated more positively than women for the same performance.

A study by Abramson et al. (1977) is an example of the research manipulating competency. Abramson et al. varied the status of a stimulus person to test the effect on perceptions of vocational,

potential marital, and interpersonal attraction. Undergraduate students were presented with a one page biography that gave the person's sex (either male or female), the person's vocation (either a successful attorney or a successful paralegal worker), and other biographical information, such as parental background, college record, extracurricular interests, and employment history. The subjects then answered several questions designed to assess their perceptions of the stimulus person. The results showed that the attorney biographies were viewed as more vocationally successful than the paralegal biographies with the female attorney being given the highest ratings of competency by the female subjects. In fact, the female biographies, in general, were rated as more vocationally successful than the male biographies. Also of interest, the male paralegal worker was considered to have the most potential for marital success, and interpersonal attraction was positively related to vocational competence. Abramson et al. concluded that gender per se did not have much effect on marriageability or interpersonal attraction. Gender did affect how vocationally successful a person was perceived with women being seen as more successful than men for the same behavior. According to Abramson et al., "the finding concerning vocational competency exemplifies the talking platypus phenomenon, that is, when an individual achieves a level of success not anticipated, his/her achievement tends to be magnified rather than diminished. After all, it matters little what the platypus says, the wonder is that it can say anything at all" (p. 123).

Like Abramson et al., Taynor and Deaux (1973) examined how sex and success influence evaluations of performance. They gave undergraduate students demographic information on a man or a woman including their

age, sex, marital status, and a short personality description. The subjects then read about an emergency situation in which the stimulus person was involved. The presentation was varied to have either the stimulus person alone in the situation or with an undescribed person of the opposite sex. After reading the demographic information and the description of the emergency situation, the subjects gave predictions of the stimulus person's and the other person's performance. They then read a description of the stimulus person's actual behavior which had been previously characterized as masculine and highly desirable in nature. The results showed that the subjects' perceptions varied with the amount of information they were given. For the undescribed other person, the predictions of performance, ability, and effort varied with the person's sex. When the other person was male, subjects expected him to perform better, have more ability, and exert greater effort than when the other person was female. In contrast, predictions of the stimulus person's behavior were not affected by gender. There were no differences in the predictions of the stimulus person's performance, ability, or effort according to sex. Further conflicting data were found when additional information concerning the success of the performance was given. After the success of the performance was known, the subjects rated the female more positively than the male and saw the female as more deserving of reward than the male. The subjects were more impressed with the female's successful masculine performance than with the male's. This study illustrates the complicated nature of the effect of gender on evaluation. When little or no information is known, subjects tend to base their evaluations on sex-role stereotypes. When more information is known, sex-role stereotypes

become much less important. Finally, when specific information concerning the success of the performance is known, sex again has an effect, but in the opposite direction of the sex-role stereotypes. It is important to notice that the sex-role of the task is also an important variable in the process. The effect of the sex-role of the task on evaluations will be discussed in a later section.

While Abramson et al. and Taynor and Deaux examined only the effect of a successful performance on evaluations, Hamner, Kim, Baird, and Bigoness (1974) and Bigoness (1976), in two related studies, examined the effect of both a successful performance and a poor performance on evaluations. Hamner et al. examined how the sex and the race of the evaluator and the sex and the race of the evaluatee influence assessments of performance on a simulated work-sampling task. Undergraduate business students assumed the role of a grocery store manager and evaluated eight applicants for the job of stock worker. The subjects viewed a videotape of each applicant completing a work sampling task of stocking cans on shelves. Each applicant gave either a poor performance or an excellent performance, with the performances being randomly varied across subjects. The subjects then rated the applicants on overall task performance. Female applicants, in general, were rated higher than male applicants on overall task performance with this effect being especially strong for high-performing applicants. Race also affected ratings with both high- and low-performing blacks being rated as average, and high-performing whites being rated as above average and low-performing whites as below average. Subjects also gave higher ratings to applicants of the same race than applicants of the other race. As one can see, the findings relating to gender are

similar to those found by Abramson et al. Females were rated more positively than males for the same performance especially when they were successful.

These findings were replicated by Bigoness (1976) who used the same experimental procedure as Hamner et al., but on male undergraduate students. He also found that females were rated higher for the same performance than men. Further examination showed that low-performing males and low-performing females were rated nearly identically, but high-performing females were rated significantly higher than high-performing males.

Jacobson and Effertz (1974) examined the effect of failure and sex on evaluations of leadership. They created a domino task that was set up in such a way that the subjects could not succeed. The subjects were placed in mixed-sex groups of three with one person appointed as the leader. The sex of the leader of each group was systematically varied. After participating in the domino task, the subjects gave their perceptions of the other members of their group. Jacobson and Effertz first checked to see if there were any performance differences between the sexes on the task, and there were none. Perceptions of performance did vary among the groups in relationship to the sex of the leader and the sex of the followers. Male leaders were judged more harshly for not succeeding than were female leaders. Stated from another angle, females were evaluated more positively than males for the same performance in a failure situation where the actual performance was known. For the followers the opposite effect was found--females were evaluated more harshly than males for the same performance. According to Jacobson and Effertz, these results illustrated different

expectations for males and females in leader and follower roles. Specifically, males should be good leaders and females should be good followers. When males do not meet the expectation of being a successful leader, they are judged more harshly than females who perform at the same level. Since females are not expected to do very well as leaders, they are judged positively for most any type of performance. Like Abramson et al. (1977), Jacobson and Effertz use an analogy to emphasize their findings in regard to perceptions of women's leadership performance. They quote Dr. Samuel Johnson who said, "A woman preaching is like a dog's walking on his hind legs. It is not done well; but you are surprised to find it done at all" (p. 393).

Other research examining the effect of competency and sex on evaluations has not found, contrary to the research just discussed, that successful women were more positively evaluated than successful men. In fact, several studies have found males being evaluated more positively than successful females.

Deaux and Taynor (1973) had undergraduate students listen to a taped verbal interview of either a female or a male scholarship applicant describing his or her academic background. Competency was manipulated by having some of the applicants well qualified academically and others poorly qualified academically. The subjects then rated the applicant on intelligence and competence. The results showed that the highly competent males were rated more positively than the highly competent females while females of low competence were rated more positively than males of low competence. Although these results do seem to conflict with the other studies discussed, the difference in results may be due to the lack of performance information in this study. The

subjects had little data on which to base their evaluations and so may have inferred from sex-role stereotypes. Males were expected to be more intelligent and more competent and so were evaluated more favorably. Females were evaluated more favorably than males when poorly qualified because not as much was expected of them.

Haefer (1977a, 1977b) gave two different subject populations, managers and state employees, sixteen different profiles of potential employees. The managers were instructed to make recommendations concerning the hiring of these individuals, and the employees were asked for their preferences concerning working with the different potential employees. In both studies, the subjects did not discriminate between barely competent males and females but indicated a strong preference for highly competent males over highly competent females. As in the Deaux and Taynor study, these conflicting results could be explained by the lack of information that was given to the subjects.

In fact, other research also supports the explanation that when little information other than level of competency is given, subjects must infer much about the stimulus person, and evaluations are more likely to follow sex-role stereotypes. When Feather and Simon (1975) gave female high school students a few sentences about several stimulus persons (minimal information) and had them rate the individuals on several dimensions, they found that successful males were judged more positively than successful females, and unsuccessful females were judged more positively than unsuccessful males. The study by Heneman (1977), discussed in the last section, is also evidence for this explanation. He manipulated competency by changing test scores but gave his subjects very little other information about applicants. The

subjects rated high scoring male applicants more positively than the high scoring female applicants, but there were no sex differences in the evaluations of the medium and low scoring applicants.

In summary, the effect of competency is related to the level of required inference. When competency information is presented in the context of little other information, evaluations are influenced by sex-role stereotypes. When competency information is presented in the context of performance information, evaluations are contrary to sex-role stereotypes. The exact amount of information required to reverse the effect of gender on evaluations is hard to determine. In fact, the research by Taynor and Deaux (1973) suggests that somewhere between minimal information and specific performance information indicating success or failure, no sex differences are found. Perhaps this medium level of information would also explain the lack of sex differences found by Frank and Drucker (1977), Hall and Hall (1976), and Terborg and Ilgen (1975).

Sex-role Congruence

Sex-role congruence refers to a match between the sex-role of a task or job, as perceived by our society, and the gender of the person performing the task. An example is a male auto mechanic (a masculine job). The opposite of sex-role congruence is sex-role incongruence which refers to the sex-role of a task and the gender of a person being different. An example is a male nurse (a feminine job). Sex-role congruence or incongruence, like required level of inference and performance level, has been offered as an explanation for the conflicting results found in the area of sex bias in evaluations (Nieva and Gutek,

1980). According to this explanation, the sex-role congruence or incongruence of a person affects the evaluations of that person. A sex-role congruent person is evaluated more positively than a sex-role incongruent person. Most of the studies in the area of sex bias in evaluation use masculine sex-role tasks or jobs so a female stimulus person is sex-role incongruent, thus indicating that males would be evaluated more positively than females. There has been some research looking directly at the congruence-incongruence variable. First the research that supports the importance of this variable will be discussed, and then research that has been contradictory will be discussed.

A study by Cash, Gillen, and Burns (1977) supports the effect of sex-role congruence or incongruence on sex bias in evaluations. In their study, personnel specialists evaluated the resume of one male or one female applicant for six potential jobs. The applicant's attractiveness was also varied by attaching an attractive picture to some resumes, an unattractive picture to others, and no picture to some (unknown attractiveness). The six potential jobs were all of low to moderate degrees of skill, prestige, and supervisory independence but varied as to masculinity and femininity. Two jobs were masculine, two were feminine, and two were neutral. The personnel specialists rated the applicant's potential for each job, the relative importance of four causal explanations of both success and failure at each job, and the advisability of five alternatives to the applicant's entering the job market (vocational training school, armed services, etc.). Analysis of the evaluations showed that males were evaluated more favorably than females for the masculine jobs while females were evaluated more favorably for the feminine jobs. Attractiveness was

important in the neutral jobs with the attractive applicant, regardless of sex, being seen as more qualified than the unattractive applicant. The causal attribution items showed that the success of females on masculine jobs was attributed less to ability and more to luck than was the males. Failure of females on masculine jobs was often attributed to inability while males' failure was attributed more to luck. For alternatives to employment, subjects suggested a four year college or the armed services more for male applicants than female applicants. As one can see, the evaluations were in the direction predicted by the congruence hypothesis. The fact that there were no sex effects in the positions congruent to both sexes is especially noteworthy as evidence for the importance of congruence.

Another study that illustrates the relationship of sex-role congruence and evaluations is by Cohen and Bunker (1975). They had male job recruiters at a university placement center evaluate a male or a female applicant for either an editorial assistant position (feminine sex-role) or a personnel technician job (masculine sex-role). The job recruiters based their evaluations on a job description, an application, and an interview transcript which basically expanded the application blank data. Cohen and Bunker found that females were more often chosen for the editorial assistant position than they were for the personnel technician job, while males were chosen more often for the personnel technician job. This study, like the one by Cash et al. (1977), shows that sex-role congruence does affect evaluations with applicants who are congruent with the sex-role of the job being more positively evaluated than applicants who are sex-role incongruent.

Further evidence is obtained from a study by Bartol and Butterfield (1976) who examined sex effects on evaluations of different leadership styles. They had undergraduate business students read four different descriptions of managers using one of four leadership styles (initiating structure, production emphasis, consideration, and tolerance for freedom). The sex of the manager in each situation was varied across subjects. After reading each story, the subjects answered a set of evaluative questions. Bartol and Butterfield found that the sex of the manager affected the evaluations for two of the leadership styles. Males were evaluated more positively than females for the initiating structure style, and females were evaluated more positively than males for the consideration style. These styles seem to correspond with expected role behavior; men are expected to initiate structure and women are expected to show consideration. Again, males and females were evaluated more positively for sex-role congruent behavior.

Another study that has been used in support of the congruence hypothesis is by Brief and Wallace (1976). However, this study is not as conclusive as Brief and Wallace present it. They had undergraduate students and librarians assume the role of a supervisor, read a report of a critical incident involving a library administrator (presented as either male or female) and predict the employee's performance. The subjects then read about the employee's performance in the situation which was either high or low, and evaluated the employee. The results showed that the sex of the employee did not affect any of the evaluations. Brief and Wallace concluded the lack of sex effects was due to the neutral sex-role of the library administrator job. The decision of neutrality was based on the lack of sex differences in

predictions of performance that were made after reading the description of the critical incident. Brief and Wallace assumed that if the job was sex-typed, the type would show up in these predictions. This assumption is not supported by Taynor and Deaux's research (1973). Taynor and Deaux used the same style of stimulus presentation and also found no sex differences in predictions for a person who was similarly described but found sex differences for a person undescribed except for sex. Their research illustrates the possibility that sex differences in predictions may not be found for a described person even when the task is sex-typed. Brief and Wallace's description of the stimulus person may have eliminated reliance on gender for predictions of behavior. If Brief and Wallace had found no sex differences in predictions of performance for an undescribed male or female, their conclusion of neutral sex-type would be better substantiated. As the research is, there is a doubt of the neutrality of the library administrator job, and a possibility that the lack of sex bias is due to the amount of information given to the subjects. The subjects may have been given enough information to eliminate inference from gender, thus causing the lack of sex effect. In summary, although Brief and Wallace's results may be due to sex-role congruence, the study is inconclusive because of the unsupported assumptions made by the researchers.

Two studies that show partial evidence for the sex-role congruence explanation of sex effects are by Sharp and Post (1980) and Heilman and Saruwatari (1979). Both studies are similar to other studies that have already been discussed but found other variables influencing the use of the sex-role congruence factor. Sharp and Post (1980) attempted to replicate the study by Cohen and Bunker (1975) by having personnel

administrators read a packet of information about a hypothetical job applicant (either a male or a female) and then evaluate the applicant's suitability for either a sports writer (masculine sex-role) or a fashion reporter (feminine sex-role). The packet contained a job description, an application, and a letter of recommendation from a former employer. The subjects also completed the Personal Attributes Questionnaire, a measure of sex-role stereotyping. Sharp and Post predicted that subjects scoring high on the questionnaire would be more likely to discriminate on the basis of sex than those who scored low. The applicants' evaluations showed no evidence of sex bias based on the sex-congruency of the job. Sex-role congruent applicants were just as likely to be hired for a job as sex-role incongruent applicants. The only sex effect found was that male applicants were rated higher on predicted success than female applicants, regardless of the sex-role of the job. Although sex-role congruency did not affect the evaluations, scores on the stereotyping questionnaire did. High scores on the questionnaire were related to negative evaluations of the female applying for the male-oriented job. Interestingly, subjects with high scores perceived female applicants, in general, as less interested in the positions for which they applied but rated the female applicants' work records more favorably than did the subjects with low scores. Perhaps this is another example of the "talking platypus." There was no relationship between the scores on stereotyping and evaluations of the male applicants. Overall, Sharp and Post's study did not support Cohen and Bunker's contention that sex-role congruency per se is the cause of sex differences in evaluations. Their research did indicate that individual differences in stereotyping are related

to the use of sex-role congruency in evaluations. Their research also suggested that females are more negatively affected by sex-role incongruency than males.

The study by Heilman and Saruwatari (1979) is related to the study by Cash, Gillen, and Burns (1977). Like Cash et al., Heilman and Saruwatari manipulated gender, attractiveness, and type of job to test their effect on evaluations. They gave undergraduate students a job description of either a managerial or a nonmanagerial position, and four application forms with a photograph attached. The applicants were varied by sex and attractiveness. The subjects were then asked to evaluate each applicant and suggest one to be hired. Overall, the sex of the applicant did not influence the evaluations, but attractiveness did. For the nonmanagerial job, attractive applicants were selected over unattractive applicants, regardless of sex. This finding is similar to Cash et al.'s results for their neutral sex-typed position. In the managerial position, which can be assumed to be a masculine sex-role, Heilman and Saruwatari found different results than Cash et al. Instead of finding that females were more negatively evaluated for a masculine sex-role job, they found that only the attractive females were negatively evaluated. Subjects preferred attractive males and unattractive females for the managerial job. This study is not as clearcut support of the importance of the congruence variable as the one by Cash et al., but the study can still be used as evidence. Heilman and Saruwatari found that attractiveness was related to perceptions of masculinity and femininity, and, of special interest here, the attractive female was seen as more feminine than the unattractive female. Thus the attractive female was seen as the most

role-incongruent which corresponds to the negative evaluation. This study and the one by Sharp and Post (1980) show that other variables, such as the subjects' stereotyping and the applicants' attractiveness can affect the importance of sex-role congruence and incongruence.

There are two studies that appear to be in direct contradiction to the congruence hypothesis but, in fact, have methodical problems that limit their importance. Gross and Geffner (1980) had undergraduate students at several colleges and nonstudents of varying ages read six articles that were descriptions of occupations supposedly written by a member of the occupational groups. Two of the occupations were stereotypically feminine, two were neutral, and two were masculine. The sex of the author was varied among the articles to create sex-role congruence for some articles and sex-role incongruence for other articles. After reading each article, the subjects evaluated both the article and the author. Overall, there was no effect of the sex of the author on the evaluations. The subject population did influence evaluations with the older nonstudents and the younger nonstudent males showing more sex bias than the other groups. This group of nonstudents evaluated the male author more positively than the female author on both congruent and incongruent job descriptions. Congruency was only an important variable for one small sample; females from one particular university preferred male authors on male topics and female authors on female topics. The results between the different groups varied so much that one group, male university students, even reversed stereotypes and preferred female authors on male topics and male authors on female topics. Generally, congruency and incongruency were not used in the evaluations of the authors. The pattern of the

responses in the different subject groups caused Gross and Geffner to question the demand characteristics and the social desirability of the study. Perhaps the study really tested how different populations respond to demand characteristics.

Another study that examined sex-role congruency but also fell prey to social desirability and demand characteristics is by Lips and Myers (1980). Undergraduate students were given a resume of a male and a resume of a female and then asked to indicate which one they would hire for a particular job. The resume's area of occupational experience and the job were varied among subjects and was either in the field of engineering, nursing, or teaching. The results showed that the female subjects more often chose the sex-role incongruent person, and the male subjects chose both sexes equally often. Because the sex variable was so readily apparent to the subjects, the study seems to test the subjects' responses to the social desirability of eliminating sex-role stereotyping rather than testing the effect of role congruence and incongruence. Any conclusions about congruence based on the results are questionable.

After reviewing all of these studies examining sex-role congruence, one can conclude that congruence or incongruence is an important variable affecting sex bias in evaluations. Congruence is not the only important variable because, although most every study uses a task or a job that is sex-role incongruent for females, not all of the studies in the area show females being evaluated more negatively than males. Some of the studies find no sex differences, and others find females being more positively evaluated than males. Differences in congruence seem to be a necessary preliminary condition for sex bias to occur

but can be suppressed by other variables such as the amount of information given to the subjects or a performance evaluation.

In the study that is the subject of this paper, sex-role congruency is not manipulated or studied. Since the job used in the study is a manager and only 25% of all managers are women (Women's Bureau, Note 1), females are assumed to be sex-role incongruent and males sex-role congruent.

Evaluator Characteristics

In addition to the required level of inference, the level of qualification, and sex-role congruency, evaluator characteristics also affect the pattern of results found in the area of sex bias in evaluations. Although Nieva and Gutek (1980) do not include the evaluator of subject variables in their attempt to explain the conflicting research results in the area, evaluator characteristics are important. The effect of three specific characteristics--sex, age, and occupation--will be discussed in this section.

The effect of evaluator sex has not been constant; many studies find no sex of subject differences while others do. The following studies discussed previously in this paper did not find evaluator sex effects: Brief and Wallace (1976); Cash, Gillen, and Burns (1977); Deaux and Taynor (1973); Dipboye, Arvey, and Terpstra (1977); Hall and Hall (1976); Heilman and Saruwatari (1979); Heneman (1977); Jacobson and Effertz (1974); Rosen and Jerdee (1973); and Sharp and Post (1980). In these studies male and female subjects reacted similarly to the stimulus materials.

There have been several studies that found evaluator sex differences, and it is important to examine these studies to see if a pattern emerges. Several studies (e.g., Bartol & Butterfield, 1976; Butterfield & Bartol, 1977; London & Poplawski, 1976; Rose & Andiappan, 1978) found that female subjects tend to give more positive evaluations for both male and female stimulus persons than do male subjects. Two other studies (Abramson et al., 1977; Levenson, Burford, Bonno, & Davis, 1975) found that females give other females more favorable evaluations than they give to males, while male subjects do not differentiate between male and female stimulus persons. Cline, Holmes, and Werner (1977) found that male subjects, like the female subjects in other studies, evaluate their like sex more favorably. This pattern of sex differences suggests that female subjects tend to be more lenient than male subjects especially toward their own sex. It is important to remember, though, that many research studies do not find any differences for the sex of the subject.

The age variable has not been examined in most of the studies, so conclusions about its effect are difficult to make. Schein (1973, 1975) examined age in two of her studies but found conflicting data. In her 1973 study, she had male middle managers rate women in general, men in general, or successful middle managers on a number of descriptive items. She found that all the men rated successful middle managers and men in general very similarly, but only older men (over 49 years old) perceived any resemblance between the characteristics of successful managers and women in general. In her 1975 study, she gave the same questionnaire to female middle managers. They also saw men in general and successful managers as more similar than women in general

and successful managers, although their perceived resemblance between women in general and successful managers was more than the male subjects' in the 1973 study. For the female subjects, although age had no influence, the amount of managerial experience did, with those subjects with the least amount of managerial experience showing the most stereotyping. These studies suggest that older, more experienced subjects are less likely to stereotype.

The third evaluator characteristic to be considered is the occupational level or background of the subjects. Occupational level is important to examine because many different types of subjects have been used in the area of evaluation bias. Like many studies in the social sciences, quite a number have used the easily accessible undergraduate student (e.g., Abramson et al., 1977; Bigoness, 1976; Deaux & Taynor, 1973; Heneman, 1977; Jacobson & Effertz, 1974; Rosen & Jerdee, 1974b). Other studies have used management level professionals (e.g., Cash, Gillen, & Burns, 1977; Cohen & Bunker, 1975; Rosen & Jerdee, 1974a; Sharp & Post, 1980). Blue collar workers were even used in a study by Haccoun, Haccoun, and Sallay (1978). Comparison of all these studies to see if there is a pattern of differences between the populations is very difficult, but no differences are readily apparent. Since some studies examined the effect of occupational level directly, it is more useful to look at these studies.

Like with evaluator sex, there have been several studies that showed no influence by occupational level, but others that did. Rosen and Jerdee (1973) used both banking supervisors and undergraduate business students and found that the occupational status of the subjects did not affect the results. Brief and Wallace (1976) found

no differences between their librarian sample and their student sample. Cline, Holmes, and Werner (1977) compared three different subject samples obtained at a university student union, a supermarket in a small town, and a supermarket in a large city. They also found the same pattern of results for all three samples.

Dipboye, Fromkin, and Wiback (1975) found no pattern of differences between undergraduate student and professional interviewers but found that students consistently rated applicants more favorably than interviewers. Hakel, Leonard, and Siegfried (cited in Bernstein, Hakel, & Harlan, 1975) also found that students gave more favorable ratings than did interviewers, although their judgement process was the same.

Two particular studies have found differences between occupation groups. Butterfield and Bartol (1977) had undergraduate, graduate, and managerial samples evaluate four different leadership styles and found the groups differed in preference. For example, managers preferred an initiating structure leadership style more than graduate students, and graduate students preferred a consideration style more than managers or undergraduates. No conclusions were made about the pattern of the differences. Inderlied and Powell (1979) also found differences between four different sample groups (undergraduate business students, MBA students, female members of a professional association for home economists, and managers in a public utility company), when they compared sex-role identity and leadership style. There was no particular pattern of differences between the groups, except that undergraduates generally held more stereotypic views than the other sample groups.

Bernstein, Hakel, and Harland (1975), in a review of the literature concerning the use of the college student subject in this area of research, concluded that there have been no important findings that limit the generalizability of using undergraduate subjects, except that students tend to give more favorable evaluations than professional interviewers. Some research (e.g., Butterfield & Bartol, 1977; Inderlied & Powell, 1979), subsequent to the Bernstein et al. review, suggests that occupational level may affect the pattern of results. The studies by Inderlied and Powell (1979) and Schein (1973, 1975) imply that when population differences are found, the younger, inexperienced subjects (such as students) tend to stereotype more than older, experienced subjects. Much more research is needed before a clear pattern can be demonstrated.

In conclusion, the effect of the different evaluator characteristics is variable across studies. The variety of research results calls attention to the need to examine evaluator characteristics more closely.

Sex Effects on Causal Attribution

When we observe the behavior of others, we are not satisfied to know what they do, we also want to know why they do it (Middlebrook, 1974). Somehow knowing why people act as they do, or the causes of their behavior, makes us think we really know what they are like. Social psychologists have developed a theory of attribution to explain the way we infer, or attribute, causes of observed behavior to the behaver.

Specifically, attribution theory proposes four different causes of success or failure of some behavior: ability, effort, luck, and task difficulty (Weiner, Frieze, Kikla, Reed, Rest, & Rosenbaum, 1971). These causes can be classified on two different dimensions which are locus of control (internal vs. external) and degree of stability (fixed vs. variable). This classification scheme can be seen in Table 1. Which causes are attributed to certain behavior is determined in part by prior expectations of behavior. If the behavior is expected, stable causes are perceived that would explain the behavior's presence over time. For example, expected success is usually attributed to ability while expected failure is attributed to lack of ability. If the observed behavior is unexpected, temporary causes such as luck and effort are used to explain the behavior's presence this one time.

Table 1

Classification Scheme for Attribution of Causes

Stability	Locus of Control	
	Internal	External
Stable	Ability	Task Difficulty
Temporary	Effort	Luck

One variable that determines which behaviors are expected and which are unexpected is the sex of the behaver. In our society men are expected to perform better at certain tasks (e.g., auto mechanics) than are women, and so their success at these tasks would be attributed to different causes than would success by women. According to the work by

Weiner et al. (1971), the men's performance would be attributed to ability while the women's performance would be attributed to luck or effort.

When the causal attribution theory is applied to the area of women in management, one would predict that the success of a woman manager, since the success is unexpected, would be attributed to temporary causes such as luck and effort rather than ability. Their failure, which would be expected, would be attributed to lack of ability. The success of a male manager would be attributed to ability while a male's failure would be attributed to lack of luck or lack of effort. Kiesler (1975) suggests that the success of a career woman would especially be attributed to effort rather than luck because success in a career requires high performance over a period of time.

Although there are very few studies that specifically examine attribution and women in management, there are several research studies illustrating that women's performance on a masculine task is usually attributed to luck or effort while men's performance is attributed to ability. Deaux and Emswiller (1974) examined attribution of two causes, ability and luck, to sex-consistent and sex-inconsistent tasks. In their study, undergraduate students listened to a bogus student (either male or female) respond to a task of identifying common objects (either mechanical tools or culinary equipment). When the students were asked to judge whether the performance was mainly due to skill or luck, the students attributed the male's performance on the masculine task to ability and the female's performance to luck. Although Deaux and Emswiller predicted that the reverse results would be found for the feminine task, this hypothesis was not confirmed.

The same pattern of results was found in a study by Taynor and Deaux (1975) who had undergraduates read a description of a male or a female performing well on a masculine or feminine task and then evaluate the performance. In this study, the masculine task was dealing with a robbery in an elevator, and the feminine task was dealing with the stimulus person's son who had observed a crime. Like Deaux and Emswiller (1973), Taynor and Deaux found that the woman performing well on the masculine task was seen as exerting more effort than the equally performing man. The man was seen as having more ability than the woman, but only by the male subjects. For the feminine task, the reverse results were again not found.

Two other studies also confirm this general pattern of findings. Feather and Simon (1975) had high school females read descriptions of males or females succeeding or failing at different occupations and then make causal attributions. The success of a male in medicine was attributed more to ability than was the success of a female. In contrast, lack of ability was seen as more important for the failure of a female than of a male. Again, the opposite pattern of results was not found for the feminine occupations of teaching and nursing. In the other study, Etaugh and Brown (1975) asked subjects to explain the performance of males and females on a mechanical task. The expected male success was attributed to ability while the unexpected female success was attributed to effort. Failure on the task was attributed to difficulty of the task for the male and lack of ability for the female.

Another study provides partial support (Taynor and Deaux, 1973). Although this study was discussed previously, the relevant

parts of the study to attribution will be reviewed. Taynor and Deaux had undergraduates read a description of either a male or a female stimulus person performing well in an emergency situation that had been previously characterized as masculine. Evaluations of the stimulus person by the subjects showed that the female was seen as more deserving of reward and as exerting more effort. There were no differences in attributions of ability by the sex of the stimulus person. In general, the female's performance was rated higher than the male's, although initial predictions of performance, effort, and ability did not differ by sex. Taynor and Deaux explain these results with the equity theory. That is, the female was acting under nonvoluntary constraints by virtue of being a female in a masculine situation, and so was perceived as being more deserving of reward for the same level of performance as the male. Since, according to the equity theory, input and outcome must be balanced, the performance of the female was inflated to make it more consistent with the deservingness of reward. Like in the other studies, female success at a masculine task was attributed to a variable cause, effort.

Terborg and Ilgen's study (1975) was also discussed in other sections but, like Taynor and Deaux's study (1973), is relevant here. Terborg and Ilgen had undergraduate students participate in an in-basket exercise requiring them to make several management decisions. As part of the task, they rated the focal person of the exercise on the sources of his/her performance. Analysis of the ratings showed that the performance of the female stimulus person was attributed more to luck than was that of the male. There were no other overall attribution differences, although some individual questions responses were

related to perceived causes of behavior. Ability was related to assignment to jobs and distribution of bonus money, but only for males; and luck was related to assignment to a training program, but only for females. In summary, ability and effort were attributed equally for males and females. The females' performance was still attributed to a variable cause, but in this study the attribution was to luck which is also consistent with the general hypothesis of causal attribution.

Additional evidence, although not quite as strong, is offered by Feldman-Summers and Kiesler (1974). In one experiment, they gave students booklets of logical and mathematical problems that had supposedly been completed by other students. Two of the booklets had been answered by two highly successful students, two by moderately successful students, and two by very unsuccessful students. In each success level, one booklet was by a male and one was by a female. After examining each booklet, the subjects rated the ability, motivation, and luck of each "student," and also the difficulty of each problem. In general, the results showed that as the level of success increased, so did attributions of ability, motivation, luck, and difficulty of the task. There was only one sex effect--females were attributed more motivation than males regardless of level of success. The other hypothesized attribution, male's success to ability, was not found.

In a second experiment, Feldman-Summers and Kiesler (1974) had undergraduate students read a description of a highly successful physician, who was presented as either male or female, and then make attributions explaining the physician's success. The medical specialty of the physician (either pediatrics or surgery) was manipulated to

examine the effect of expectations since pretesting had shown males and females were expected to do equally well in pediatrics while men were expected to be more successful than women in surgery. Overall, more motivation was attributed to the female physician than to the male physician. The speciality of the profession did not differentially affect the attributions which Feldman-Summers and Kiesler concluded was due to pediatrics and surgery not being that different since women were not expected to do better than men in pediatrics. In fact, Feldman-Summers and Kiesler have not been able to find a single occupation in which females are expected to be more successful than males. Like in the study by Taynor and Deaux (1975), sex of the subject was found to interact with the sex of the physician. Male subjects attributed more ability to the male physician than to the female physician; female subjects had no difference in attribution of ability but did perceive the male physician as having had an easier task than the female. Feldman-Summers and Kiesler suggest that the difference between the male and female subjects may be due to the women's movement causing women to become more sensitive to the task difficulty of a woman becoming a physician.

Another study that shows sex of subject differences and also is the only study to find the opposite pattern of attribution for a feminine job or task is by Lips and Myers (1980). They presented undergraduate students with one of four descriptions of either a male or a female succeeding at being an automotive mechanic or a secretary. After reading the description, the subjects were asked to what they would attribute the success. The male subjects attributed the success of the male mechanic and the female secretary more to ability than to

motivation, while they attributed the success of the female mechanic and the male secretary more to motivation than ability. This pattern supports the hypothesis concerning prior expectations and attribution. The expected successful behavior (male mechanic, female secretary) was attributed to a stable factor (ability), while the unexpected behavior (female mechanic, male secretary) was attributed to a variable factor (motivation). The female subjects did not attribute causes in the same way. They attributed the success of the male mechanic more to motivation than ability and showed no difference between attributions to ability and motivation for the other three stimulus persons. Lips and Myers propose that the sex of the subject effect may be due to the sensitivity of the women to sex-role stereotyping causing them not to respond as strongly as the men to the sex-role appropriateness of the stimulus person's career.

Further considerations in the attribution of causes, in addition to the sex of the evaluator, arise when one examines the research by Garland and Price (1977) and Stevens and DeNisi (1980). In both studies attributions of success and failure of a female manager were correlated with scores on the Women As Managers Scale (Peters, Terborg, & Taynor, 1974). Garland and Price had male undergraduates complete the WAMS, read a description of a female manager who either succeeded or failed, and then rate attributions of the cause of the outcome. The results showed that the WAMS scores were positively correlated with attributions to ability and to effort for the successful manager and negatively correlated with attributions to luck and to nature of job. The attributions for failure and the WAMS scores were uncorrelated.

In a replication of the study by Garland and Price (1977), Stevens and DeNisi (1980), using both male and female undergraduates, found that the male subjects followed the same pattern of results as the male subjects in Garland and Price's study (1977). In addition, they found, for the male subjects, that attributions to lack of effort was negatively correlated with the WAMS in the failure condition. Female subjects, on the other hand, showed no correlations between their WAMS scores and their attributions for success or failure. Both of these studies suggest that attitudes toward women managers is another variable that may affect the pattern of attribution.

In summary, research studies in the area of causal attribution generally support the hypothesis that sex affects attribution, but only for masculine tasks. In a successful performance, women are perceived as exerting more effort or being luckier than men while men are seen as having more ability (Deaux & Emswiller, 1974; Taynor & Deaux, 1973; Taynor & Deaux, 1975). Kiesler's (1975) contention that women's success in their careers would be attributed more to the variable cause of effort rather than luck is also supported (Feldman-Summers & Kiesler, 1974; Lips & Myers, 1980). The predictions for attribution in a failure situation are also validated. Unsuccessful performance by women is attributed to lack of ability (a stable cause) while unsuccessful performance by men is attributed to lack of effort (Etaugh & Brown, 1975; Feather & Simon, 1975). When the task is feminine, the opposite results were not found with the exception of the study by Lips and Myers (1980) (Deaux & Emswiller, 1974; Feather & Simon, 1975; Taynor & Deaux, 1975). This lack of effect seems to be due to the difficulty of finding any task at which females are expected

to do better than males. According to Feldman-Summers and Kiesler (1974), men are expected to be more successful than women at even so-called feminine occupations such as elementary school teaching and nursing. Two other variables that may affect causal attribution are the sex of the evaluator and the evaluator's attitudes toward stereotyping. When the sex of the evaluator makes a difference in the attribution process, it is the male evaluators who respond in the hypothesized direction and the female evaluators who do not (Feldman-Summers & Diesler, 1974; Lips & Myers, 1980; Taynor & Deaux, 1975; Stevens & DeNisi, 1980). Attitudes may also affect attribution as two research studies showed that attitudes toward women managers affected the attribution of causes for the success and the failure of a woman manager (Garland & Price, 1977; Stevens & DeNisi, 1980).

Women As Managers Scale

This section describes the Women As Managers Scale (WAMS) and then discusses research relevant to its validity.

Peters, Terborg, and Taynor (1974) designed the WAMS to measure stereotypic attitudes toward women as managers. Fifty-five items were originally developed and then tested on 345 male and 196 female undergraduate students. Analysis of the items reduced the scale to 21 items representing three factors: general acceptance of females as managers, feminine barriers, and manager descriptive traits. The split-half reliability of the scale was .91 (corrected for the length of the scale). The final form of the scale has 11 statements favorably describing women as managers and 10 unfavorably describing women as managers to which respondents indicate how strongly they agree or

disagree using 7-point Likert scales. High scores on the scale reflect favorable attitudes toward women as managers and low scores reflect unfavorable.

While Peters et al. were developing the scale, they also partially demonstrated its validity by comparing the students' WAMS scores to their attitude toward the women's movement (as measured by their response to a Likert scale statement). Attitudes toward women as managers and attitudes toward the women's rights movement were highly correlated.

Terborg, Peters, Ilgen, and Smith (1977) replicated this test for validity, but with full-time employees of an international distributing company. They also found that attitudes toward women as managers were highly correlated with attitudes toward the women's movement. In addition, female employees who said they were committed to their career tended to have favorable attitudes toward women as managers. These correlations and the one by Peters et al. (1974) suggest that the WAMS does measure attitudes toward women and work.

Terborg and Ilgen (1975) investigated the relationship between attitudes toward women in management and discriminatory behavior. Undergraduate students played the role of a supervisor making a number of management decisions regarding subordinates. This research project was discussed in more detail in the required level of inference section. Terborg and Ilgen found that WAMS scores were related to the decision to hire a new employee. Subjects with favorable attitudes rated the female applicant more positively than subjects with less favorable attitudes. This correlation was found even though sex of the applicant per se did not affect the hiring decision. The WAMS did not correlate with any of the other variables (e.g., task assignment, bonus money,

promotability). Interestingly, the WAMS correlated with discriminatory behavior only in a situation where very little other information was available.

In another study related to the validity of the WAMS, Garland and Price (1977) examined the relationship of the WAMS to attributions of success and failure of women in management. Male undergraduate students completed the WAMS, read a short three sentence description of a female manager who succeeded or failed, and rated four possible causes for the success or failure (ability, effort, luck, and nature of job). The WAMS scores were positively correlated with attirubutions to ability and effort for the successful women while WAMS scores were negatively correlated with attributions to luck and nature of job. Correlations between the WAMS and attribution in the failure condition were not significant. This study illustrated that the attitudes measured by the WAMS relate to other ways of perceiving women. Again it should be noted that the subjects had very little information about the manager.

In the same study, Garland and Price gave additional male undergraduates a description of a female manager who succeeds or fails and then had the subjects complete the WAMS. They were interested in seeing if the scores on the WAMS were affected by the preceding description of a successful or an unsuccessful woman. The scores of the WAMS were not different from the scores where the subjects were given the WAMS prior to reading the description. This lack of difference provides evidence for the cross-situational stability of the scale.

Stevens and DeNisi (1980) replicated the study by Garland and Price (1977) but used both male and female undergraduate students as subjects. As in the previous study, Stevens and DeNisi found that the

WAMS scores of the males were positively related to ability and effort in the success condition. They did not find a significant negative correlation for luck and nature of job in the success condition, but they did find, contrary to Garland and Price, that lack of effort was negatively correlated with the WAMS in the failure condition. In other words, male subjects with favorable attitudes toward women in management were less likely to see lack of effort as the reason for failure than male subjects with unfavorable attitudes. The analysis for the female subjects showed no significant correlations between scores on the WAMS and attributions for success or failure. Stevens and DeNisi suggested that the lack of variability of the WAMS scores (as indicated by the standard deviation) for women may explain the lack of effect. The women had a much lower standard deviation than did the men, as well as scoring significantly higher.

Other research has been more critical of the WAMS. Herbert and Yost (1978) were interested in how susceptible the scale is to faking so they had undergraduate students take the scale under normal conditions and then retake it after being instructed to answer as a pro-feminist or an antifeminist. The scores for the fake high and the fake low were significantly different from the normal scores indicating that subjects were able to identify the attitude being tapped by this scale and could easily fake attitudes in that direction. Herbert and Yost (1978) concluded that given the current climate of the women's movement and federal antibias requirements, people are more likely to fake attitudes, thus diminishing the usefulness of the scale.

In contrast, Ilgen and Terborg (1975) reported that responses to the WAMS were uncorrelated with responses to the Crowne-Marlowe Social

Desirability Scale. These conflicting findings suggest that subjects can easily fake the WAMS but do not.

A research study by Cohen and Leavengood (1978) gives further evidence of problems with the validity of the WAMS. They had male undergraduates participate in an in-basket exercise similar to the one used by Rosen and Jerdee (1974a) where subjects responded to a number of memos each describing a specific supervisory or personnel problem. After reading each memo, the students rated a number of alternatives for dealing with the situation. Some time later the subjects completed the WAMS. Like Rosen and Jerdee (1974a), Cohen and Leavengood found that the sex of the stimulus person affected responses with females receiving less favorable personnel decisions than males. Contrary to the study by Terborg and Ilgen (1975), scores on the WAMS did not correlate with the personnel decisions made by the subjects. Cohen and Leavengood suggest that the lack of correlation may be due to the fact that the WAMS does not measure attitudes toward women in management or that attitudes and behavior (as measured in this study) are not related.

In summary, the research on the validity of the WAMS is definitely inconclusive. Scores on the WAMS do seem to be related to other attitudes toward women (Peters et al., 1974; Terborg et al., 1977), but its relationship with behavior is less conclusive. The studies by Garland and Price (1977) and Stevens and DeNisi (1980) give some support for the validity of the WAMS as it relates to attribution, but only for males. The correlation between scores on the WAMS and other discriminatory behavior besides attribution is weak. Terborg and Ilgen (1975) found responses to the WAMS related to only the decision

to hire a female and not to any of the other nine variables present in the study, while Cohen and Leavengood (1978) found the WAMS did not correlate with any of their variables. Careful analysis of these studies suggests that the correlation of the WAMS to behavior is variable and is only seen where there is not a direct sex effect and there is a high level of required inference. In conclusion, more research is needed on the usefulness of the Women As Managers Scale. While there is some evidence for its relationship to attribution, there is very little evidence for its relationship to other discriminatory behavior. Both types of relationships are examined in this research study.

CHAPTER 3
METHOD

Subjects

Two groups of subjects took part in the experiment: bank managers (N = 166) and undergraduate students (N = 240). The bank managers were employed by banks throughout Florida in a variety of management positions, such as branch manager, assistant branch manager, trust officer, cashier, and operations manager. Their names were obtained from the Florida School of Banking where they had participated in continuing education courses. One hundred and seventy-three males and one hundred and fifty-eight females were sent the experimental materials. There were 173 packets returned (52%) of which 7 were unuseable for a variety of reasons including respondents not fully completing the Performance Rating Scale and not having any management experience. The return rate for the male subjects (51%) and for the female subjects (53%) was very similar. Of the 166 packets included in the analysis, 89 were completed by male managers and 77 were completed by female managers. The average age of the managers was 34 with 10 years of work experience including 5 years of managerial experience. The female and male managers did not significantly differ on years of work experience or years of managerial experience, but the females were older than the males (35.25 vs. 33.03), F (1, 164) = 3.67, $p < .05$.

The undergraduate population consisted of students currently enrolled in an introductory psychology course at the University of

Florida who were participating in research projects as part of their course requirements. The sample group consisted of 120 males and 120 females. The average age of the students was 19 with 2 years of work experience including 3 months of managerial experience. The majority of the students (213 of 240) had no managerial experience. The male students were slightly older than the female students (19.88 vs. 19.01, F (1, 238) = 9.51, $p < .01$), had more work experience (2.92 vs. 1.27, F (1, 238) = 34.75, $p < .01$), and had more managerial experience (.36 vs. .10, F (1, 238) = 6.99, $p < .01$).

As expected, the two subject populations were different in age and the amount of work and managerial experience. The management sample was older (F (1, 404) = 812.85, $p < .01$), had more work experience (F (1, 404) = 413.30, $p < .01$), and had more managerial experience (F (1, 404) = 353.32, $p < .01$) than the student sample.

Materials

The stimulus materials consisted of three items: Instruction and Demographic Data Sheet, Career Opportunities Application, and Performance Criteria for Assistant Branch Manager. The dependent measure was the Performance Rating Scale. The other material used in the study was the Women As Managers Scale.

Instruction and Demographic Data Sheet

This sheet was the first page of the research packet and was given to all the subjects. The top half of the sheet listed the other materials present in the packet, presented basic information about the bogus branch bank in the study as to the size of the bank and the type

of customer orientation, and gave instructions on how to complete the packet. The bottom half of the sheet asked for demographic data about the subject. The subjects were requested to give their sex, age, total years of work experience in career, total years of managerial experience in career, and their present position.

There were two different forms of the Instruction and Demographic Data Sheet because the student packets included the Women As Managers Scale and the management packets did not necessitating different instructions. Both forms can be seen in Appendix A and B.

Career Opportunities Application

The application for promotion from assistant branch manager to branch manager was a variation of an actual application used by a banking corporation in Florida. The basic questions and outline were the same, but identifying information about the particular corporation and information irrelevant to the study were deleted.

Demographic data about the applicant such as educational degree and years of work experience were chosen after interviews with two bank managers from different bank corporations. The names of the male and the female applicant were chosen from a study by Nevill and Kriseman (Note 2). In their study, undergraduate students rated 35 different names on a 5-point scale as to whether the name was for males only or for females only. Charles was the most common name considered for males only and Ellen was considered the most often for females only. Because of these findings, the applicant was named either Ellen or Charles Turner. The completed application for both Ellen and Charles can be seen in Appendix C and D.

Performance Criteria for Assistant Branch Manager

The performance criteria were developed from an actual job description for an assistant branch manager position and an evaluation form for that position. The responsibilities of an assistant branch manager were divided into four categories: management skills, customer services, banking skills, and work habits and personal development. Under each category was an explanation of the job responsibilities related to the category and two or three appraisal factors for which the employee would receive a rating. For example, under management skills the employee would be rated on organization, effectiveness, and overall job knowledge. A complete listing of the job responsibilities and appraisal factors can be seen in Table 2.

There were three different forms of the performance criteria in order to vary the type of evaluation and, in one condition, to have no evaluation. The performance criteria for the excellent evaluation and the poor evaluation conditions began with a description of a rating scale of 1 to 5. A rating of 5 meant the employee's performance was clearly exceptional in every respect and a rating of 1 meant the performance was generally unsatisfactory. The appraisal factors in each condition were assigned numbers corresponding to the type of evaluation. The order of numbers was taken from a random numbers table. Each condition had three ratings of the most extreme score (1 or 5), six ratings of the next score (2 or 4), and two middle scores (3). In the no evaluation condition, the rating description and the ratings were deleted. Each of the three forms was also varied by the name of the person being evaluated, either Ellen or Charles Turner. All six

Table 2

Performance Criteria for Assistant Branch Manager

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1. MANAGEMENT SKILLS

Assists in the supervision of a full service bank. Assumes responsibility for a portion of the routine operations. Assists the branch manager in any way needed. Must be mature and responsible, able to work well under pressure.

Appraisal Factors:

1. Organization. Ability to set priorities and plan efficiently.
2. Effectiveness. Includes ability to persuade others to act and ability to perform well under stress.
3. Overall Job Knowledge. Knowledge of background subjects and related procedures.

2. CUSTOMER SERVICES

Insures that all customer services are provided such as customer inquiries and problems. Acts as a liaison between the bank and all customers. Sells bank services.

Appraisal Factors:

1. Customer Contact. Includes ability to courteously help customers and maintain rapport.
2. Customer Expansion. Ability to sell bank services and seek prospective customers.
3. Communication Skills. Ability to communicate effectively and tactfully with customers and co-workers over the telephone, person to person, and in writing.

3. BANKING SKILLS

Must be familiar with overdrafts and charging off of same, installment and commercial loans and preparation of loan documents. Must know savings service activities including researching and preparing out-of-balance savings statements. Knows correct use of machines and equipment.

Table 2 (Continued)

Appraisal Factors:

1. Quality and Quantity of Work. Amount of work produced, speed in which tasks are accomplished, and accuracy and completeness of finished work.

2. Application. Ability to apply one's self to work and initiative demonstrated in keeping productively occupied.

4. WORK HABITS AND PERSONAL DEVELOPMENT
Must have good personal habits, positive attitude, enthusiasm and cooperation in work. Interested in professional development.

Appraisal Factors:

1. Personal. Includes neatness and decorum, ability to follow bank and safety rules, and amount of absenteeism.

2. Attitude. Response to supervision, contribution to morale, and willingness to assist others.

3. Development. Interest and success in further training including outside education.

of the Performance Criteria for Assistant Branch Manager can be seen in Appendix E, F, G, H, I, and J.

Performance Rating Scale

Perceptions of the applicant were obtained by having the subjects rate the applicant on 16 different 6-point Likert scale items. Several of the items were chosen from items that reflected sex bias in similar studies by Cohen and Bunker (1975) and Sharp and Post (1980). The subjects were asked to rate the applicant's interest in the position of branch manager, the amount of job related experience and training, and knowledge of the occupational area. They were also asked to rate the applicant's ability, motivation, and luck as well as the ease or difficulty of the job. The subjects then recommended a hiring decision. Future success and promotability were evaluated by four items: how accepted by the co-workers the applicant would be as branch manager, how satisfied the applicant would be as branch manager, how successful the applicant will be in the future, and the probability of further promotion in the future. The last four items of the scale determined causal attribution by having the subjects rate the importance of the applicant's ability, effort, luck, and nature of job to the applicant's job performance. The complete performance rating scale can be seen in Appendix K.

Women As Managers Scale (WAMS).

This scale, developed by Peters, Terborg, and Taynor (1974), was devised to measure attitudes toward women as managers. There are 21 statements about women in management that are based on 3 factors:

general acceptance of females as managers, feminine barriers, and manager descriptive traits. Half of the statements are positively stated and half are negatively stated. Subjects are asked to indicate how strongly they agree or disagree with each statement using 7-point Likert scales. High scores reflect favorable attitudes toward women in management and low scores reflect unfavorable. The range of possible scores is 21 to 147. Peters et al. (1974) found the reliability of the scale to be .91. A more detailed discussion of the scale and its validity can be found in Chapter 2. The scale itself is in Appendix L.

Pilot Study

The materials that were developed for this research project were first pilot tested on 14 subjects. There were five subjects (four females, one male) from the banking industry representing three different bank corporations. Three of the subjects were branch managers, one was a commercial loan officer, and one was a personnel officer. The rest of the pilot study subjects (seven females, two males) were undergraduate students from the same population as the student sample.

All of the subjects were administered the same condition of the study. Ellen, negative evaluation, was chosen because that condition was the most extreme and unexpected in the sense of a poorly performing employee requesting a promotion.

If subjects had any criticisms about the study, the criticisms were more likely to be elicited in that condition. In fact, many subjects did comment on how negative the evaluation was and asked why would this person even bother applying for a promotion. These

remarks necessitated making the evaluation less extreme in order to make the evaluation task more believable.

After examining the stimulus materials, the subjects were asked to complete the Performance Rating Scale and a feedback questionnaire (Appendix M). In addition, the five bank subjects were interviewed to obtain further comments. The research materials were found to be generally understandable with the bogus bank materials seen as representative of those in the banking industry. Improvement of the materials was needed in two areas in addition to the extreme negative evaluation form already discussed. The description of the branch bank was consquently changed to make the size of the bank, as indicated by the amount of deposits, and the number of employees better correspond. Also, the instructions and wording of the causal attribution items on the Performance Rating Scale required rewriting and then retesting with four additional undergraduate students (three females and one male) to insure clarity. The final stimulus materials and Performance Rating Scale were described under the section on materials.

Procedure

The subjects were assigned to one of six treatment conditions: Ellen, no evaluation; Charles; no evaluation; Ellen, excellent evaluation; Charles, excellent evaluation; Ellen, poor evaluation; and Charles, poor evaluation. The student sample was randomly assigned to one of the six conditions within the limits of having 20 males and 20 females in each. For the bank sample, the treatment conditions were balanced for the geographical area of the subjects (metropolitan or rural) as well as for the sex of the subjects. In addition, all

subjects from the same bank were assigned to the same condition to prevent comparison of the materials. Within these considerations for balancing the treatment conditions, the subjects were randomly assigned. As can be seen in Table 3, four of the conditions has 29 males and two had 28; three conditions had 27 females and three had 26.

Table 3

Number of Male and Female Managers Assigned to Each Experimental Condition

Experimental Condition	Female Managers	Male Managers
Female applicant, no evaluation	26	28
Male applicant, no evaluation	27	29
Female applicant, excellent evaluation	27	29
Male applicant, excellent evaluation	26	28
Female applicant, poor evaluation	26	29
Male applicant, poor evaluation	27	29

Every subject in both the student and the bank sample was given an informed consent form (see Appendices N and O), an Instruction and Demographic Sheet, a Career Opportunities Application for either a male or a female manager, and one of the three types of Performance Criteria (positive, negative, or no evaluation information).

The bankers were mailed their experimental materials with a cover letter (see Appendix P) and a stamped return envelope. To prevent the

sex of the investigator from possibly influencing the results of the study, the cover letter was signed with only the investigator's initials and last name. Twelve days later a follow-up postcard was sent to those subjects who had not yet returned their materials (see Appendix Q). Upon receipt of the completed materials by the investigator, the subjects were mailed the Women As Managers Scale with a cover letter (see Appendix R) and a stamped return envelope. This separate mailing was necessary because the subject matter of the scale (stereotypic attitudes toward women as managers) is very apparent from the items. If it had been included in the first packet, the scale might have influenced the subjects' perceptions of the study and their responses on the Performance Rating Scale. The return rate for the materials in the first mailing was 52%; for the Women As Managers Scale, 97%.

The undergraduate students were tested in groups of 10 to 40. The student sample was given the Women As Managers Scale in the same testing session because the experimenter could prevent them from examining the scale prior to completing the other materials. Testing continued until 20 subjects in each cell were obtained.

CHAPTER 4
RESULTS

The effect of the independent variables (subject population, applicant sex, subject sex, amount of information, and level of performance or qualification) on the dependent variables (the 16 questions on the Performance Rating Scale) were examined by analyses of covariance using the least squares principle to correct for unequal numbers of subjects in the different conditions. The relationship of the subjects' age, years of work experience, years of managerial experience, and WAMS scores with the ratings was determined by using them as covariables in the analyses. Interactions between the independent variables were investigated for simple main effects by using t-tests on the adjusted means.

The responses on the Performance Rating Scale of 166 managers and 240 students were used in the analyses. The distribution of the subjects across conditions can be seen in Table 4.

In this chapter the effect of each of the independent variables, their interactions, and the covariables are discussed. To simplify the discussion of the results, the responses to the Performance Rating Scale are considered in three categories: applicant evaluation questions (1, 2, 3, 4, 5, 6, 8, 9, 10, 11, 12), causal attribution questions (13, 14, 15, 16), and perception of the assistant branch manager position (7).

Table 4

Number of Managers and Students by Sex Used in the Analyses of Data

Experimental Condition	Managers		Students	
	Female	Male	Female	Male
Female applicant, no evaluation	14	11	20	20
Male applicant, no evaluation	11	13	20	20
Female applicant, excellent evaluation	14	16	20	20
Male applicant, excellent evaluation	9	21	20	20
Female applicant, poor evaluation	12	14	20	20
Male applicant, poor evaluation	17	14	20	20

Population

The influence of the two subject populations, bank managers and undergraduate students, was very important because differences in population determined whether the two populations would be combined for the analysis of other variables.

Overall, the analysis of the responses showed that population was a significant influence on the evaluations. For 9 of the 11 applicant evaluation questions, the student population gave more favorable evaluations than did the management population. The means for each group and the significance levels for each question can be seen in Table 5. The two questions that did not show population differences were the rating of luck and the hiring decision by the

Table 5

Mean Ratings and F-values of Populations for Applicant Evaluation Questions

Questions	Means		F (1,376)
	Managers	Students	
1. Interest in position	4.22	4.57	11.26**
2. Job related experience and training	3.55	4.01	17.87**
3. Knowledge of occupational area	3.46	4.12	53.83**
4. Ability	3.77	3.95	4.08*
5. Motivation	3.75	4.08	9.87**
6. Luck	3.69	3.58	0.96[a]
8. Hiring decision	3.55	3.76	3.80
9. Acceptance by co-workers	3.27	3.80	27.88**
10. Satisfaction as branch manager	3.66	4.31	24.49**
11. Success in future	3.72	4.13	21.70**
12. Probability of further promotion	3.75	4.11	14.88**[b]

Note. The range of scores is 1.00 to 6.00 with higher numbers indicating more favorable ratings.

[a] F (1,370)

[b] F (1,375)

* $p < .05$

** $p < .01$

subjects. Responses to the attribution questions were not affected by the subject population, as can be seen in Table 6. The question pertaining to the difficulty of the assistant branch manager position did show significance with the students ($\overline{X}$ = 3.06) viewing the job as more difficult than the managers ($\overline{X}$ = 3.30), F (1,376) = 5.20, $p < .05$.

Table 6

Mean Ratings and F-values of Populations for Attribution Questions

Questions	Means		F (1,376)
	Managers	Students	
13. Importance of ability	4.59	4.65	0.35
14. Importance of effort	4.76	4.89	1.31
15. Importance of luck	3.10	3.02	0.30
16. Importance of nature of job	4.04	4.24	3.50

Note. The range of scores is 1.00 to 6.00 with higher numbers indicating more favorable ratings.

Note. All the F-values are insignificant.

Because of these important differences between the two groups, separate analyses of covariance were run. The results of each subject population will be discussed individually for each of the other independent variables.

Applicant Sex

Neither the managers nor the students found the sex of the applicant to be a significant influence on the responses to the majority of the questions. In fact, applicant sex produced different results on only one question for the managers and only one question for the students. The managers rated the female applicant ($\bar{X}$ = 3.95) as having more ability than the male applicant ($\bar{X}$ = 3.57), F (1,145) = 5.76, $p < .05$. The students perceived luck as more important for the male applicant ($\bar{X}$ = 3.21) than for the female applicant ($\bar{X}$ = 2.84), F (1, 224) = 5.69, $p < .05$.

Information Level (Amount of Information and Level of Performance)

The effect of the amount of information and the effect of the level of performance or qualification on the ratings of the applicants were examined by the three information levels: no evaluation, excellent evaluation, and poor evaluation. All three levels of information caused significant differences in the evaluations by the managers and the students.

The ratings by the managers on all the applicant evaluation questions were affected by the information level, with the exception of the rating of luck. Applicants with the excellent evaluation received the most favorable ratings followed closely by those with no evaluation. Applicants with the poor evaluation received the most unfavorable ratings. The mean ratings, F-values, and probability levels for the t-tests between the information levels of each of the questions can be seen in Table 7.

Table 7

Mean Ratings and F-values of Information Levels for Applicant Evaluation Questions, by Managers

Questions	Means			F (2,145)
	Excellent Evaluation	No Evaluation	Poor Evaluation	
1. Interest in position	4.92	4.64	3.10	43.00**
	ns	$p < .01$		
2. Job related experience and training	4.17	3.98	2.48	48.07**
	ns	$p < .01$		
3. Knowledge of occupational area	4.32	3.96	2.08	101.43**
	$p < .05$	$p < .01$		
4. Ability	4.63	4.16	2.49	69.97**
	$p < .05$	$p < .01$		
5. Motivation	4.93	4.36	1.96	130.94**
	$p < .01$	$p < .01$		
6. Luck	3.58	3.61	3.87	0.81[a]
	ns		ns	
8. Hiring decision	4.66	4.22	1.78	88.00**
	ns	$p < .01$		
9. Acceptance by co-workers	4.20	3.81	1.78	80.68**
	ns	$p < .01$		
10. Satisfaction as branch manager	4.44	3.82	2.68	23.91**
	$p < .05$	$p < .01$		
11. Success in future	4.74	4.21	2.17	105.54**
	$p < .01$	$p < .01$		
12. Probability of further promotion	4.75	4.32	2.12	122.02**[b]
	$p < .05$	$p < .01$		

Note. The range of scores is 1.00 to 6.00 with higher numbers indicating more favorable ratings.

[a] F (2,139)

[b] F (2,144)

** $p < .01$

Two of the attribution questions answered by the managers were also affected by the information level. As Table 8 shows, ability and effort were much more important to the success of the applicant (excellent evaluation) than they were to the failure of the applicant (poor evaluation). The importance of luck and the nature of the job were perceived similarly regardless of the information level.

The evaluative question on the position of assistant branch manager showed information level differences. The subjects in the no evaluation condition rated the job as more difficult ($\bar{X}$ = 2.94) than did the subjects in the excellent evaluation condition ($\bar{X}$ = 3.47) or the subjects given the poor evaluation ($\bar{X}$ = 3.50), F (2,145) = 4.37, $p < .05$.

Like the managers, the students' responses to the applicant evaluation questions were strongly influenced by the level of information. The applicants with excellent evaluations were again rated the most favorably followed by the applicants with no evaluations and the applicants with the poor evaluations. In Table 9 are the mean ratings, F-values, and probability levels for the t-tests between the information levels of each of the questions.

On the attribution questions, the students, also like the managers, saw ability and effort as more important in the excellent evaluation and the no evaluation conditions than in the poor evaluation condition. In addition, the students given no evaluation perceived the nature of the job (easy or difficult) as more important to the applicant's performance than did the students given evaluations ratings for the applicant (either excellent or poor). There were no differences in the attribution of luck. These results can be seen in Table 10.

Table 8

Mean Ratings and F-values of Information Levels for Attribution Questions, by Managers

Questions	Means			F (2,145)
	Excellent Evaluation	No Evaluation	Poor Evaluation	
13. Importance of ability	4.95	4.64	4.14	6.48**
	ns	$p < .05$		
14. Importance of effort	5.16	4.68	4.45	4.35*
	ns	ns		
15. Importance of luck	3.06	3.17	3.06	0.09
	ns	ns		
16. Importance of nature of job	4.20	4.06	3.81	0.25
	ns	ns		

Note. The range of scores is 1.00 to 6.00 with higher numbers indicating more favorable ratings.

*$p < .05$

**$p < .01$

Table 9

Mean Ratings and F-values of Information Levels for Applicant Evaluation Questions, by Students

	Questions	Means			F (2,224)
		Excellent Evaluation	No Evaluation	Poor Evaluation	
1.	Interest in position	5.26	4.86	3.60	62.24**
		$p < .01$	$p < .01$		
2.	Job related experience and training	4.62	4.29	3.12	40.17**
		ns	$p < .01$		
3.	Knowledge of occupational area	5.06	4.56	2.70	165.60**
		$p < .01$	$p < .01$		
4.	Ability	4.77	4.47	2.62	156.82**
		$p < .05$	$p < .01$		
5.	Motivation	5.04	4.69	2.50	143.51**
		$p < .05$	$p < .01$		
6.	Luck	3.83	3.64	3.26	5.81**
		ns	$p < .05$		
8.	Hiring decision	4.80	4.43	2.05	203.96**
		$p < .05$	$p < .01$		
9.	Acceptance by co-workers	4.46	4.44	2.50	119.78**
		ns	$p < .01$		
10.	Satisfaction as branch manager	4.68	4.69	3.55	22.60**
		ns	$p < .01$		
11.	Success in future	4.85	4.82	2.71	193.04**
		ns	$p < .01$		
12.	Probability of further promotion	4.92	4.73	2.70	138.90**
		ns	$p < .01$		

Note. The range of scores is 1.00 to 6.00 with higher numbers indicating more favorable ratings.

** $p < .01$

Table 10

Mean Ratings and F-values of Information Levels for Attribution Questions, by Students

Questions	Mean			F (2,224)
	Excellent Evaluation	No Evaluation	Poor Evaluation	
13. Importance of ability	4.95	4.78	4.22	10.88**
	ns		$p < .01$	
14. Importance of effort	5.14	5.04	4.49	9.16**
	ns		$p < .01$	
15. Importance of luck	3.17	3.08	2.82	1.77
	ns		ns	
16. Importance of nature of job	4.22	4.46	4.03	4.23*
	ns		$p < .01$	

Note. The range of scores is 1.00 to 6.00 with higher numbers indicating more favorable ratings.

*$p < .05$

**$p < .01$

The students in the no evaluation condition also perceived the job of assistant branch manager as more difficult ($\overline{X}$ = 2.85) than did the students in the excellent evaluation condition ($\overline{X}$ = 3.08) or the students in the poor evaluation condition ($\overline{X}$ = 3.24), F (2,224) = 3.35, $p < .05$.

Subject Sex

The main effect of the sex of the subject (male or female) was minimal. Subject sex was a significant variable for only one of the managers' questions and only one of the students'. The sex of the subject affected the managers' responses to one of the attribution questions: the female managers ($\overline{X}$ = 5.04) perceived the level of the applicant's effort as more important to the job performance than did the male managers ($\overline{X}$ = 4.48), F (1,145) = 5.60, $p < .05$. For the students, the subject sex affected the response to the job evaluation question with the female students ($\overline{X}$ = 2.79) viewing the job as more difficult than did the male students ($\overline{X}$ = 3.33), F (1,224) = 12.65, $p < .01$.

Applicant Sex X Information Level

Applicant sex interacted with information level on three of the students' applicant evaluation questions and one of the students' attribution questions. There were no significant interactions for the managers.

The three applicant evaluation questions that showed interaction effects were interest in position (F (2,224) = 4.76, $p < .01$), knowledge of occupational area (F (2,224) = 7.27, $p < .01$), and satisfaction as

branch manager (F (2,224) = 5.06, $p < .01$). The students rated the female applicant as less interested in the position of branch manager than the male applicant in the poor evaluation condition ($p < .01$) but more interested in the no evaluation condition ($p < .01$). There were no differences in the applicants' ratings in the excellent evaluation condition (see Figure 1). The same general pattern was found in the other two evaluation questions. The female applicant was rated as less knowledgeable of the occupational area than the male applicant in the poor evaluation condition ($p < .01$) but more knowledgeable in the excellent evaluation condition ($p < .05$) and similarly in the no evaluation condition (see Figure 2). The students perceived the female applicant as being less satisfied with the position of branch manager than the male applicant in the poor evaluation condition ($p < .01$) and equally satisfied as the male in the excellent and the no evaluation conditions (see Figure 3).

The only attribution question that was affected by the applicant sex-information level interaction was the students' attribution of effort, F (2,224) = 4.48, $p < .05$. For the poor job performance, the students attributed lack of effort more to the male than to the female, $p < .05$. For the excellent and the unknown job performance, the students attributed effort equally to the male and the female stimulus person. The pattern of results can be seen in Figure 4.

Applicant Sex X Subject Sex

The interaction of applicant sex and subject sex affected only one question for the managers and only one for the students. For the managers, the applicant evaluation question pertaining to knowledge of

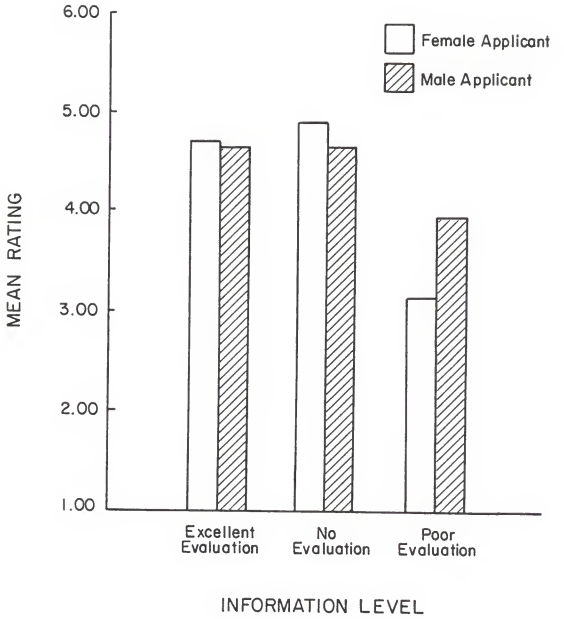

Figure 1. The interaction of applicant sex and information level on interest in position, by students.

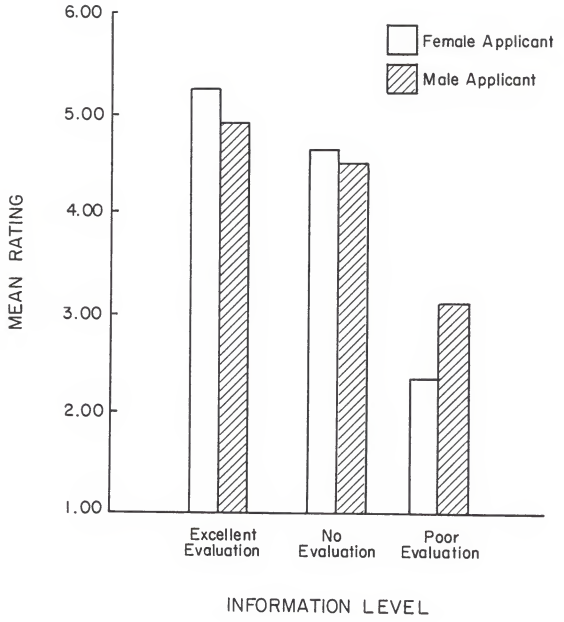

Figure 2. The interaction of applicant sex and information level on knowledge of occupational area, by students.

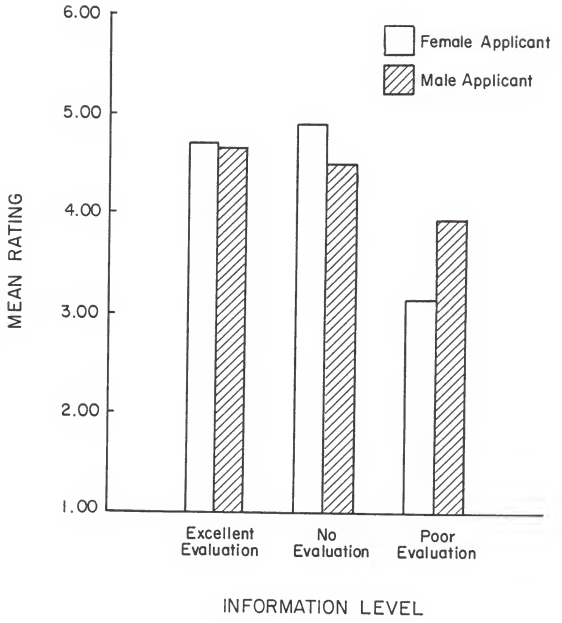

Figure 3. The interaction of applicant sex and information level on satisfaction as branch manager, by students.

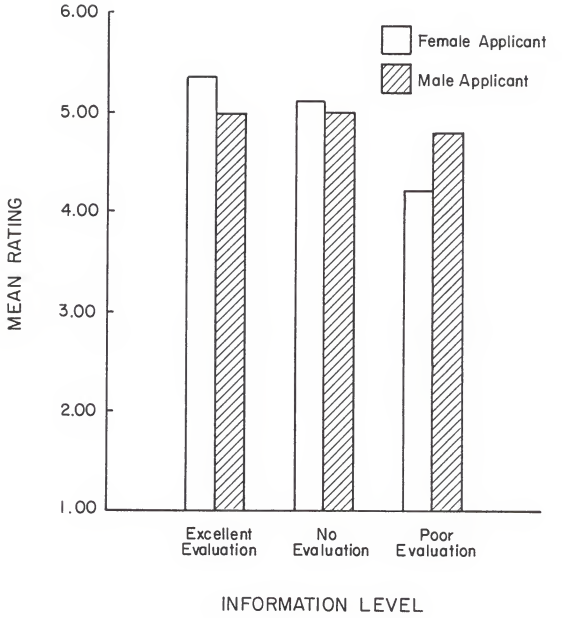

Figure 4. The interaction of applicant sex and information level on importance of effort, by students.

occupational area was influenced, F (1,145) = 4.14, $p < .05$. Further analysis of the interaction showed that each sex rated the like sex more favorably than the opposite sex (see Figure 5). The only question for the students that was affected by the interaction was the attribution of nature of job, F (1,224) = 4.28, $p < .05$. The nature of the job (easy or difficult) was considered much less important to the female applicant's performance by the male students than by the female students, $p < .05$. Both sexes viewed the importance of nature of job equally for the male applicant (see Figure 6).

Information Level X Subject Sex

There were no interaction effects for the managers, but five of the students' applicant evaluation questions showed a significant interaction. The rating of motivation was affected by the sex of the subject and the type of information (F (2,224) = 3.82, $p < .05$), with the female subjects rating the applicants more extremely than the male subjects did. The females gave higher ratings of motivation in the excellent evaluation condition than the males did, $p < .05$ (see Figure 7). There were no differences in the other two conditions. This general pattern of females giving more extreme ratings was also found in the responses to the other four questions. On the hiring decision question (F (2,224) = 3.18, $p < .05$), female subjects were less likely to suggest hiring an applicant with a poor evaluation than were the male subjects, $p < .05$. There were no differences between the subjects in the excellent and the no evaluation conditions (see Figure 8). The third question that showed a significant interaction was acceptance by co-workers, F (2,224) = 6.12, $p < .01$. Again, further investigation

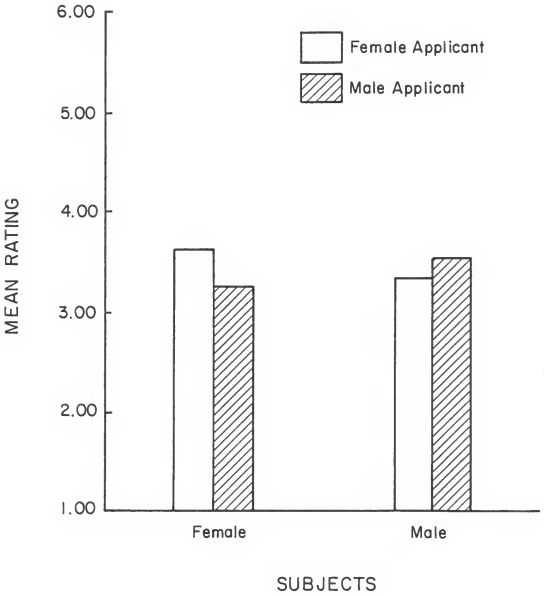

Figure 5. The interaction of applicant sex and subject sex on knowledge of occupational area, by managers.

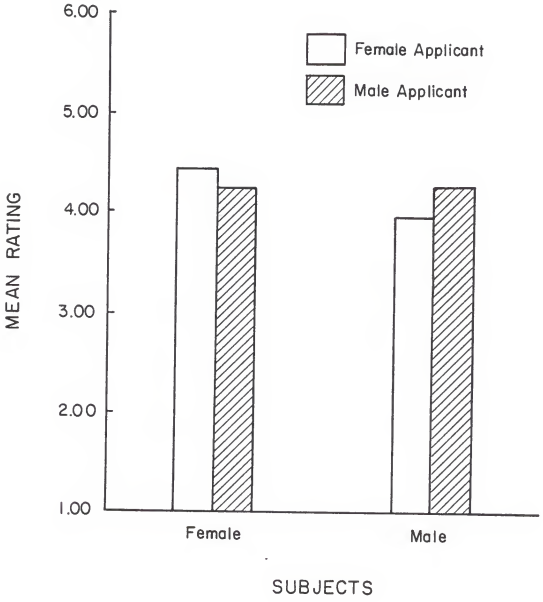

Figure 6. The interaction of applicant sex and subject sex on importance of nature of job, by students.

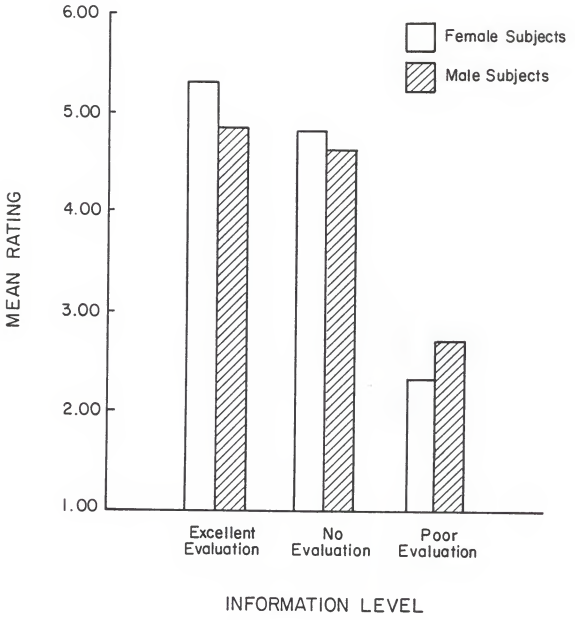

Figure 7. The interaction of subject sex and information level on motivation, by students.

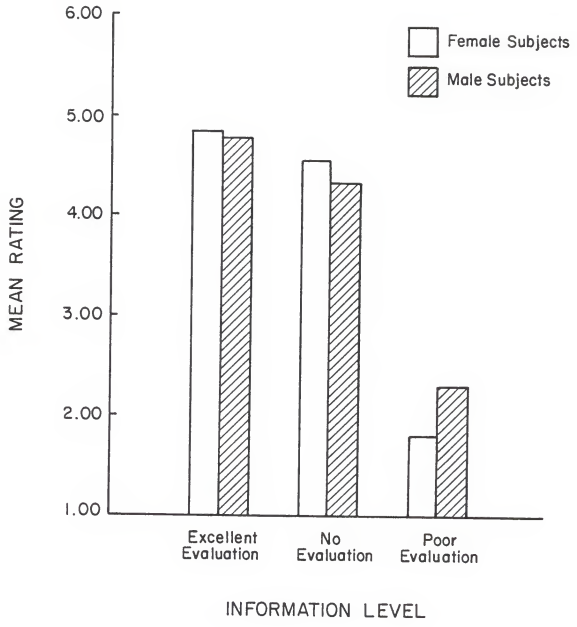

Figure 8. The interaction of subject sex and information level on hiring decision, by students.

into the interaction showed the females rating acceptance lower than the males in the poor evaluation condition ($p < .05$) and higher in the excellent evaluation condition ($p < .05$). The no evaluation condition had no sex of subject differences (see Figure 9). The satisfaction as branch manager question (F (2,224) = 5.69, $p < .01$) was answered more extremely by the female subjects with the biggest difference in the poor evaluation condition ($p < .05$). The interaction can be seen in Figure 10. The last question that was affected by the interaction was the prediction of future success, F (2,224) = 3.80, $p < .05$. Again, the females gave more extreme ratings in the poor evaluation condition than did the males ($p < .01$), and there were no differences in the other two conditions (see Figure 11).

Applicant Sex X Information Level X Subject Sex

The independent variables of applicant sex, information level, and subject sex interacted on three of the managers' attribution questions, and two of the students' attribution questions. There were no significant interactions on any of the other questions for either group.

The three attribution questions answered by the managers that were affected were the importance of ability (F (2,145) = 3.30, $p < .05$), the importance of effort (F (2,145) = 4.69, $p < .01$), and the importance of luck (F (2,145) = 3.41, $p < .05$). On the attribution of ability question, male subjects attributed the male applicant's unsuccessful performance (poor evaluation) to lack of ability less often than to the female applicant, $p < .05$. The female subjects rated the male and the female applicants equally. In the other two information levels

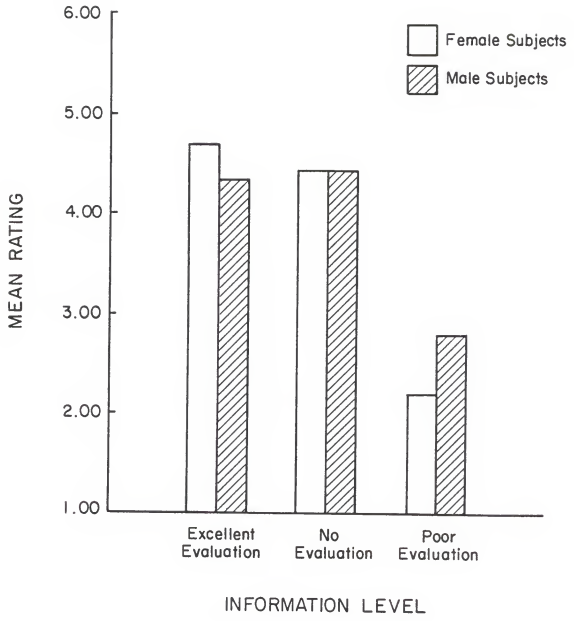

Figure 9. The interaction of subject sex and information level on acceptance by co-workers, by students.

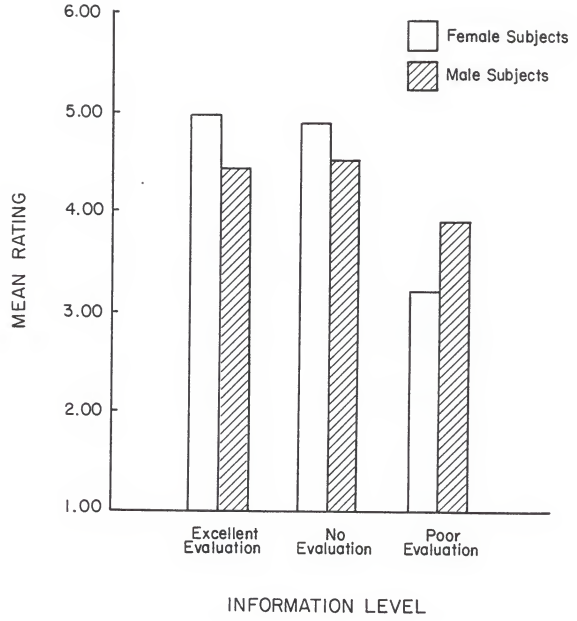

Figure 10. The interaction of information level and subject sex on satisfaction as branch manager, by students.

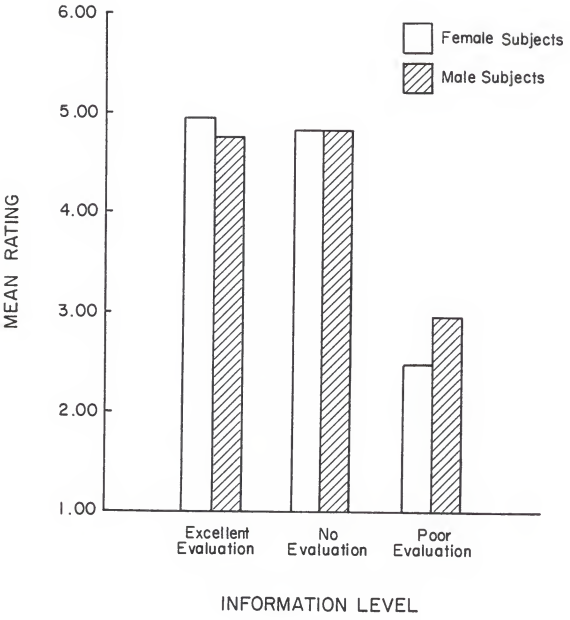

Figure 11. The interaction of information level and subject sex on success in future, by students.

(no evaluation and excellent evaluation), there were no differences between the subjects or the applicants (see Figure 12).

The pattern of the interaction for the attribution of effort was similar to the pattern for the attribution of ability. The male subjects rated lack of effort as much less important to the male subject's unsuccessful performance than to the female applicant's, $p < .01$. There were no applicant sex or subject sex differences in the other two evaluation conditions (see Figure 13).

A different pattern for the poor evaluation condition was found for the attribution of luck. Male subjects attributed the male's performance in this condition to bad luck while they attributed bad luck to the female's performance much less often, $p < .05$. There were no differences in attribution by the female subjects in the poor evaluation condition. Again, like in the other two attribution questions, the no evaluation and the excellent evaluation conditions were not affected by subject sex or applicant sex (see Figure 14).

The two student attribution questions that had significant interactions of the three variables were importance of effort (F (2,224) = 3.69, $p < .05$), and importance of luck (F (2,224) = 3.84, $p < .05$). When attributing effort, the female subjects saw lack of effort as much less important to the performance of the female's unsuccessful performance than it was to the male applicant's, $p < .05$. The male subjects attributed lack of effort equally often to the male and female applicant. In the no evaluation condition, the female subjects saw effort as more important to the female applicant's performance than to the male applicant's performance. The male subjects saw effort as equally important to the male's and the female's performance, but

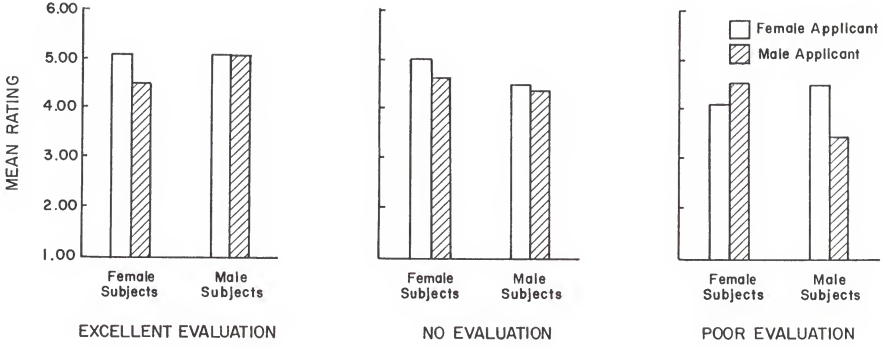

Figure 12. The interaction of information level, applicant sex, and subject sex on importance of ability, by managers.

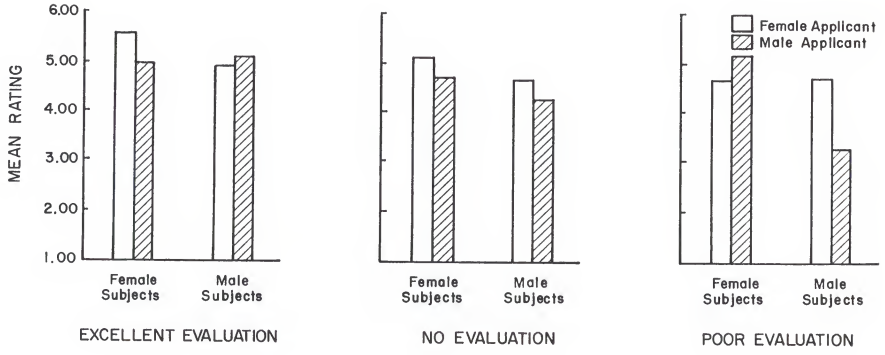

Figure 13. The interaction of information level, applicant sex, and subject sex on importance of effort, by managers.

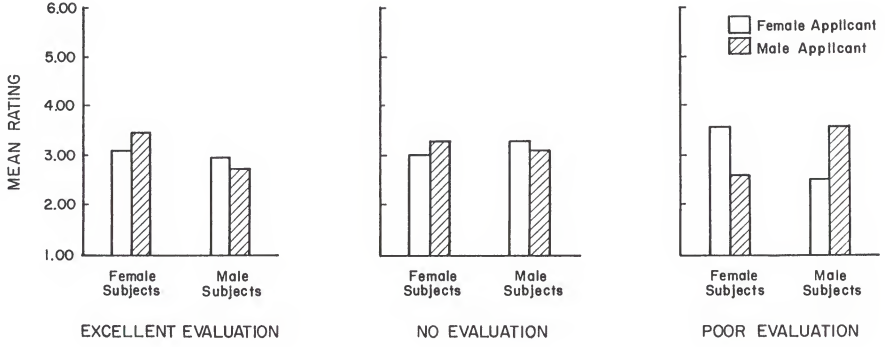

Figure 14. The interaction of information level, applicant sex, and subject sex on importance of luck, by managers.

more important than the attribution by the female subjects for the male applicant. In the excellent evaluation condition, the female subjects attributed effort equally to the male and female applicants, but this time, the male subjects rated effort as much less important to the performance of the male than to the performance of the female, $p < .05$. All three of these patterns can be seen in Figure 15.

The pattern for the interaction on the question pertaining to the attribution of luck was the same for the students as the managers. Male subjects attributed lack of luck to the male's unsuccessful performance more than to the female's unsuccessful performance, $p < .05$. There were no differences in attribution by the female subjects. In the no evaluation condition, female subjects saw luck as less important to the performance of the female applicant than to the male applicant. The male subjects attributed luck equally to the two sexes. The excellent evaluation condition showed no influence by subject sex or applicant sex (see Figure 16).

Subject Age

The effect of the age of the subjects on the evaluations was investigated by using age as a covariable in the analysis of variance procedure. Two of the managers' applicant evaluation questions and four of the students' applicant evaluation questions showed significant correlations.

The managers' rating of ability (F (1,145) = 5.24, $p < .05$) and rating of motivation (F (1,145) = 6.26, $p < .05$) were influenced by the age of the subjects. The older subjects tended to give more favorable ratings of ability (slope = .33) and more favorable ratings of motivation (slope = .37) than did the younger managers.

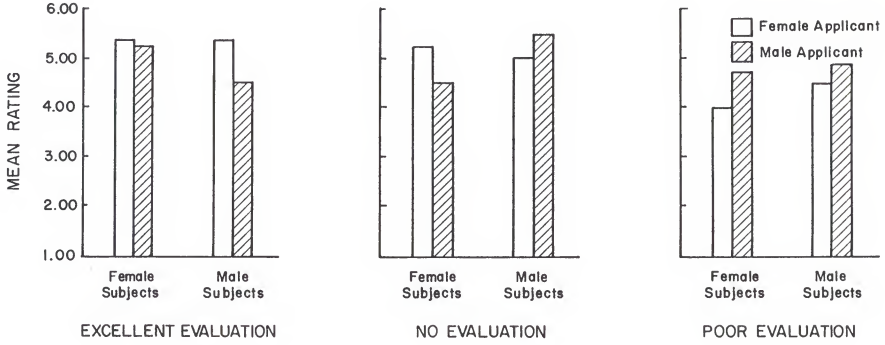

Figure 15. The interaction of information level, applicant sex, and subject sex on importance of effort, by students.

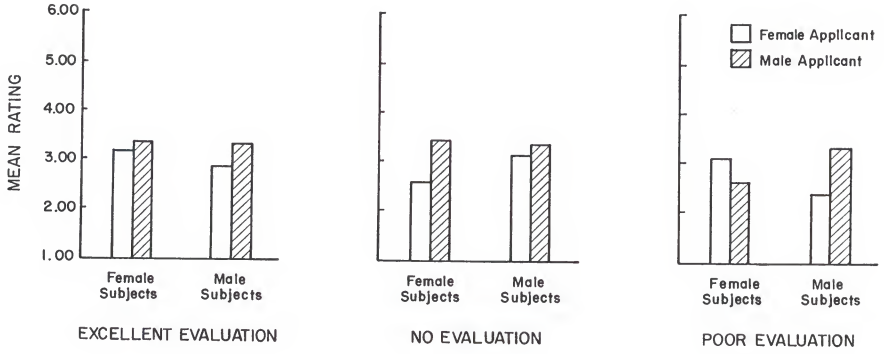

Figure 16. The interaction of information level, applicant sex, and subject sex on importance of luck, by students.

In contrast to the managers' positive relationship between age and evaluations, the students' ratings were negatively related to age. The four questions that showed negative relationships were ability (F (1, 224) = 4.33, $p < .05$, slope = -.65), decision to hire (F (1,224) = 8.83, $p < .01$, slope = -1.04), acceptance as branch manager (F (1,224) = 15.07, $p < .01$, slope = -1.34), and success in future (F (1,224) = 5.64, $p < .05$, slope = -.70). On each of these questions, the younger students gave more favorable evaluations than the older students did.

Years of Work Experience

The subjects' total years of work experience were significant as a covariable on only one of the questions answered by the managers and two of the questions answered by the students.

The question answered by the managers that showed a relationship between the total years of work experience and the evaluation ratings was the probability of further promotion, F (1,144) = 3.96, $p < .05$. The managers with more years of work experience tended to perceive further promotion more probable for the applicant than did the managers with fewer years (slope = .11).

The students' years of work experience was also positively related to ratings, but on the satisfaction as branch manager question, F (1,224) = 6.31, $p < .05$. The students with more years of work experience rated the applicant as more satisfied than did the students with less experience (slope = 1.12). Ratings of the difficulty of the job of assistant branch manager were negatively correlated with the students' years of work experience, F (1,224) = 9.51, $p < .01$. The younger the student, the easier the job was perceived (slope = -1.07).

Years of Managerial Experience

Responses by the managers to two of the questions on the Performance Rating Scale were related to their years of managerial experience. The students' years of managerial experience did not correlate with any of their ratings on the scale.

The ratings by the managers of job related experience and training was negatively correlated with the managers' years of managerial experience, F (1,145) = 4.46, $p < .05$. The more years of managerial experience the managers had, the more likely they were to give unfavorable ratings of the applicant's experience and training (slope = -.66). The other question that showed a relationship with the years of managerial experience was attribution of luck, F (1,145) = 6.62, $p < .05$. The managers with more managerial experience viewed luck as less important to the applicant's job performance than managers with less experience (slope = -1.20).

Women As Managers Scale

Scores on the WAMS were examined in two ways: 1) as a dependent variable to examine the relationship of WAMS scores with the subject population, the subject sex, the years of work experience, the years of managerial experience, and the subject's experimental condition; and 2) as an independent variable to determine the relationship of WAMS scores with evaluations and causal attribution for the applicants. First the results of the analysis using scores on the WAMS as a dependent variable will be discussed followed by a description of the relationship between WAMS scores and evaluations of managerial performance.

Preliminary analysis showed that the WAMS scores of the managers ($\overline{X}$ = 121.07) and the students ($\overline{X}$ = 121.80) were not significantly different, F (1,397) = 0.00, ns. The scores on the WAMS did vary according to the sex of the subject, F (1,397) = 122.97, $p < .01$. Further analysis revealed that the difference in the WAMS scores between males and females was the same for both subject populations, F (1,397) = 1.42, ns. The average score for the female subjects (managers and students) was 129.36, and for the male subjects 114.16. The scores for the females ranged from 92 to 147, and the scores for the males ranged from 73 to 147. The mean scores for the male and female subjects were then compared with the scale's norms (Peters, Terborg, & Taynor, 1974). The mean score of the male subjects (114.16) was significantly higher than the means score of the male norms (109.15), t (550) = 3.36, $p < .01$. In contrast, the mean score of the female subjects (129.35) was significantly lower than the mean score of the female norms (132.27), t (388) = -2.27, $p < .05$.

The other demographic variables of the subjects, age, years of work experience, and years of managerial experience, did not correlate with scores on the WAMS.

To determine whether the experimental conditions influenced the subjects' WAMS scores, the effect of the sex of the applicant and the information level were examined. The managers' scores did not differ between the six conditions, F (2,155) = .29, ns. The students, however, did show differences between the six conditions, F (2,234) = 4.97, $p < .01$. Students in the male applicant with the poor evaluation condition ($\overline{X}$ = 126.03) scored significantly higher on the WAMS (indicating more favorable attitudes toward women as managers) than

the students in the male applicant with the excellent evaluation condition ($\bar{X}$ = 118.25) or with no evaluation condition ($\bar{X}$ = 119.85), for both $p < .05$. The students in the three female applicant conditions did not differ significantly in their scores. Because the students' scores on the WAMS were related to the experimental conditions and so could not be assumed to be independent, further analyses of the WAMS on the evaluations of the applicants were not made for the students.

The effect of WAMS scores on evaluations by managers was analyzed first by using WAMS as a covariable and then as a qualitative variable in three categories (high, middle, and low scores), once corrected for subject sex and once uncorrected for subject sex. When the WAMS scores were analyzed as a covariable, two of the managers' questions showed a significant relationship. Ratings of job related experience and training had a small positive increase as the scores on the WAMS increased, F (1,145) = 4.39, $p < .05$, slope = .12. The perceptions of the importance of the nature of the job also had a positive relationship with those scoring high on the WAMS considering the nature of the job more important to the applicant's performance than those scoring low, F (1,145) = 4.17, $p < .05$, slope = .14.

When scores on the WAMS were divided into the top 1/3, the middle 1/3, and the lower 1/3 by each sex, analysis of variance revealed no significant relationships with the evaluations. When these categories were not corrected for sex, three questions showed an interaction of the WAMS category and the sex of the applicant. The three questions were knowledge of occupational area (F (5,155) = 2.79, $p < .05$), motivation (F (5,155) = 2.60, $p < .05$), and probability

of further promotion (F (5,155) = 2.42, $p < .05$). Managers with scores in the lower third gave lower ratings to the female applicant, in comparison to the male applicant, on knowledge ($p < .05$), on motivation ($p < .05$), and on probability of further promotion ($p < .05$). Managers with scores in the top third gave higher ratings to the female applicant, in comparison to the male applicant, on knowledge ($p < .05$), and on motivation ($p < .01$). The managers with scores in the middle third did not differ in their evaluations of the male and the female applicant. The relationship between WAMS scores and applicant sex for the three questions can be seen in Figures 17, 18, and 19.

Summary of Tests of Hypotheses

1. The amount of information, the level of performance, and the sex of the stimulus person interact to affect the perception of the applicant. Specifically, males are evaluated more positively when performance on a masculine job or task is unknown, and females are evaluated more positively than males when the success or failure of the performance is known. Not supported by managers. Partially supported by students.

2. Expectations of behavior that are based on the sex of the stimulus person and the level of performance affect causal attribution with expected behavior being attributed to stable causes and unexpected behavior being attributed to variable causes. In particular, the success of a female manager is attributed to effort while the success of a male manager is attributed to ability. A female manager's failure is attributed to lack of ability, and a male

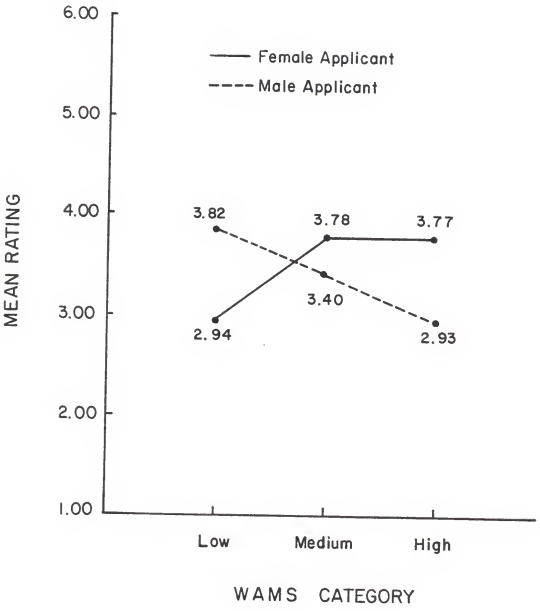

Figure 17. The interaction of WAMS scores (by categories) and applicant sex on knowledge of occupational area, by managers.

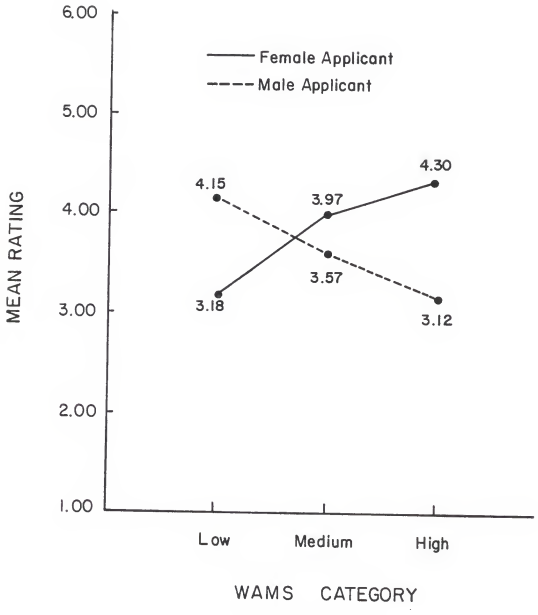

Figure 18. The interaction of WAMS scores (by categories) and applicant sex on motivation, by managers.

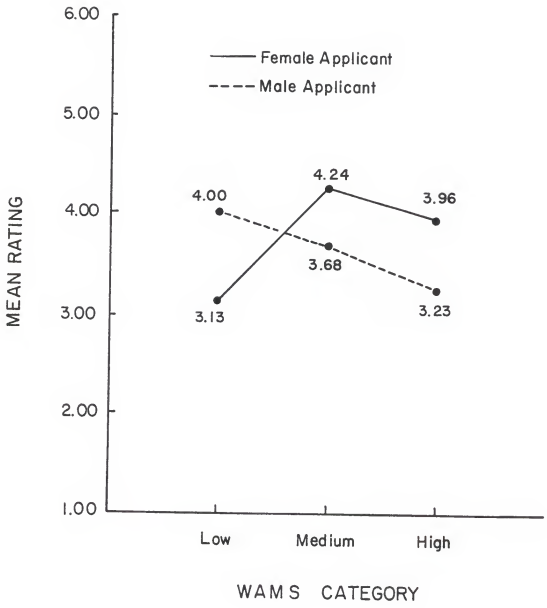

Figure 19. The interaction of WAMS scores (by categories) and applicant sex on probability of further promotion, by managers.

manager's is attributed to lack of effort or bad luck. Supported by male subjects.

3. Attitudes toward women managers affect how causal attribution of performance is made. Persons with favorable attitudes toward women managers attribute a woman's success to internal factors (effort and ability) while persons with less positive attitudes attribute success to external factors (luck and nature of job). Not supported.

4. Male and female subjects similarly evaluate stimulus persons. Supported by managers. Not supported by students.

5. The sex of the stimulus person or evaluatee affects the evaluation made by the student population more than the management population. Supported.

CHAPTER 5
DISCUSSION

This chapter is divided into three main sections: 1) evaluations of managerial performance, 2) causal attribution of managerial performance, and 3) implications. In the sections on evaluations and causal attributions, the results of this study are reviewed and conclusions about the pattern of the results are made. In the third section, the overall implications of the research are discussed, the limitations of the study are noted, and suggestions for future research are presented.

Evaluations of Managerial Performance

This research project was designed to study some of the variables thought to be responsible for the conflicting results found in the area of sex bias in evaluations. A review of the literature indicated that the required level of inference, the level of performance, the sex-role congruence, and the evaluator characteristics all played a role in causing the vast array of results. This study examined the effect of the required level of inference, the level of performance, and the evaluator characteristics on the evaluations of managers. Sex-role congruence was not manipulated but, since only 25% of all managers are women (Women's Bureau, Note 1), was assumed to be sex-role incongruent for females and sex-role congruent for males. In

this section, the findings of the study regarding the influence of each of these factors on the evaluations of the applicant are discussed.

Required Level of Inference

The required level of inference was examined by having some subjects base their evaluations of a manager on only an application form and a job description, while others also had a performance evaluation for the manager's last year of employment. Contrary to expectation, the male applicant was not evaluated more positively than the female applicant in the no evaluation condition where minimal information was given. In fact, the pattern of the results for the no evaluation condition was very similar to the pattern of the results for the positive evaluation condition. The subjects seemed to assume that the applicant with no evaluation performed well during the last year. Perhaps this assumption was made because the stimulus person, already an assistant branch manager, was applying for a promotion, and employees usually become proficient at their present job before requesting a promotion. The studies finding male applicants evaluated more positively than female applicants generally gave the subjects an application for a new job (e.g., Heneman, 1977; Rosen & Jerdee, 1974b) rather than an application for a promotion as in the present study, which suggests that an application for promotion presents more information about the applicant than does an application for a new job. In the present study then, the no evaluation condition, in which the stimulus manager applied for a promotion, indirectly, and unexpectantly, gave the subjects performance information about the applicant. As a result, none of the conditions had the minimal level of information

needed to test for the pattern of males being evaluated more favorably than females on a masculine task. Thus, required level of inference was not adequately examined in the study.

Level of Performance

The level of performance (excellent or poor) affected all the evaluations of the applicants. The applicant with the excellent evaluation was evaluated more favorably on every question than was the applicant with the poor evaluation, thus confirming the effect of the experimental manipulation. As was stated in the last paragraph, the applicant with no evaluation was rated similarly to the applicant with the excellent evaluation. A review of past research indicated that the level of performance interacts with the sex of the applicant with the results that females are more favorably evaluated than males for equal performance (excellent or poor) in a masculine job (e.g., Abramson et al., 1977; Jacobson & Effertz, 1974; Taynor & Deaux, 1973). The interaction was not found in any of the evaluations by the managers but was found in several questions answered by the students. As hypothesized, the female applicant with the excellent evaluation was seen as more interested in the position of branch manager, and more knowledgeable of the occupational area than the male applicant. In the poor evaluation condition, the female was rated lower, rather than higher as expected, than the male on interest in position, knowledge of occupational area, and satisfaction as branch manager.

These results give only weak support for the hypothesis that females are evaluated more positively than males when performance level is known. The only evidence for the pattern of females being

evaluated more positively than males for successful performance was by student, but only on a few questions. The managers did not respond as hypothesized. One possible explanation for the weak support is that the assumption that the job of branch manager is incongruent for females is incorrect. Perhaps the job of branch manager is sex-role congruent for females as well as for males. The bank manager sample, more than the student sample, would be aware of the sex-type of the job, thus explaining the difference between the two groups. When a job is neutral in sex-type, as may be here, sex differences are less likely to appear (Cash, Gillen, & Burns, 1977).

Evaluator Characteristics

The evaluator characteristics that were examined in this study were occupational level (managers and students), sex (male and female), age, years of work experience, years of managerial experience, and attitudes toward women as managers.

The population or occupational level of the subjects strongly influenced the evaluations of the applicants. On the majority of the applicant evaluation questions, the students gave more favorable ratings than the managers regardless of performance level. This pattern was also found by Dipboye, Fromkin, and Wiback (1975) and Hakel, Leonard, and Siegfried (cited in Bernstein et al., 1975). The students' evaluations were also more affected by the interaction of applicant sex and information level, and by the interaction of subject sex and information level. As was discussed earlier, the students evaluated the female applicant more extremely than the male on interest in position of branch manager, knowledge of occupational

area, and satisfaction as branch manager. The female students also rated all the applicants more extremely than the male students on motivation, hiring decision, acceptance by co-workers, satisfaction as branch manager, and prediction of future success. These results indicate that the students' evaluations were more affected by the sex of the applicant and the sex of the evaluator than were the managers'. The finding that subject population influences the pattern of results is supported by other research in the area (Inderlied & Powell, 1979).

The sex of the evaluator (or subject) had virtually no effect on the evaluations of the applicant by the managers but did influence the perceptions by the students. The only exception for the managers was that the female managers rated the female applicant as more knowledgeable than the male applicant, and the male managers rated the male applicant as more knowledgeable than the female applicant. Sex of the subject played a significant role for the students on a number of questions with the female students rating the applicant more extremely than the male students. There were also some differences between male and female subjects, both managers and students, in the attribution of causality which will be discussed in a separate section.

The age of the evaluator did influence some evaluations, but in opposite directions for the managers and the students. Older managers tended to give more favorable ratings of ability and motivation than younger managers. Older students, in contrast, gave more unfavorable ratings than younger students on ability, decision to hire, acceptance as branch manager, and success in future.

Interpretation of the differences between the populations must consider the fact that the variability in the ages of the students was small (Range 17-36, $\overline{X}$ = 19.44, SD = 2.21), while the variability was greater for the managers (Range 21-59, $\overline{X}$ = 34.06, SD = 7.49), and that the older student was much younger than the older manager.

Evaluations of managerial performance were affected very little by the evaluators' years of work experience or years of managerial experience. Except for a few questions, neither demographic characteristic influenced the overall pattern of evaluations for either the manager or student populations.

The managers' attitudes toward women as managers, as measured by the Women As Managers Scale (Peters, Terborg, & Taynor, 1974), had some effect on the evaluations of the applicant. Managers with positive attitudes tended to give more favorable ratings of experience and training than managers with less positive attitudes. The managers' scores on the WAMS did interact with applicant sex on several evaluation questions with managers with low scores giving lower ratings to the female applicant than the male applicant on knowledge of occupational area, motivation, and probability of further promotion. In contrast, high-scoring managers gave higher ratings to the female applicant than to the male applicant on these questions. The interactions between WAMS scores and the sex of the applicant offer some support for the validity of the Women As Managers Scale. The results suggest that evaluators' attitudes toward women managers in general can affect their evaluations of a specific female manager.

The analysis of the relationship between the WAMS scores of the students and evaluations by the students was not completed because

preliminary analysis determined that the WAMS scores varied according to the experimental condition. This finding is contrary to other research showing that scores on the WAMS were not affected by the experimental conditions (Garland & Price, 1977; Stevens & DeNisi, 1980). Interestingly, the WAMS scores by the students varied between the male applicant conditions rather than the female applicant conditions as one would expect. Students in the male applicant, poor evaluation condition scored higher on the WAMS than did the students in the male applicant, excellent evaluation condition or in the male applicant, no evaluation condition. Perhaps reading about the unsuccessful male manager enabled the students to see the possibility that even a female could be a more successful manager than this particular male, and so their attitudes toward women managers became more favorable, at least momentarily while completing the WAMS. The fact that the students showed differences in their WAMS scores between conditions and the managers did not may be explained by the difference in the experimental procedure for the two subject groups. The students completed the WAMS immediately after reading the stimulus material, and the managers completed the WAMS approximately one week later.

Causal Attribution of Managerial Performance

The relationship between the pattern of causal attribution and the independent variables of applicant sex, level of performance, subject population, subject sex, and WAMS scores was examined. The pattern of causal attribution refers to the relative importance of level of ability, amount of effort, type of luck, and nature of job (easy or difficult) in explaining the performance of an assistant

branch manager. The results of this study showed that the sex of the applicant, the level of performance, the sex of the evaluator (or subject), and the subject population influenced the attribution ratings. The other relationship of interest, the scores on the WAMS and the pattern of attribution was not found to be significant. Each of these relationships will be discussed in this section.

Overall, ability and effort were seen as more important to the performance of the assistant branch manager than were luck or the nature of the job. The level of performance influenced the pattern of attribution for both managers and students, with ability and effort being perceived as more important to a successful performance than an unsuccessful performance. The importance of luck was rated similarly across conditions. The managers also rated the importance of the nature of the job approximately the same across levels of performance, but the students rated the nature of the job as more important to an unknown performance than to an unsuccessful performance. The pattern of ability and effort being considered more important to a successful performance than to an unsuccessful performance is consistent with the pattern found by Feldman-Summers and Kiesler (1974).

Of primary interest was the effect of applicant sex and level of performance on the pattern of causal attribution. Behavior that is expected should be attributed to stable causes such as ability and nature of job; while behavior that is unexpected should be attributed to less stable causes such as luck and effort. Since the success of the female manager would be unexpected, a positive evaluation should be attributed to effort or to good luck; whereas, since the success of a male manager would be expected, a stable cause such as ability

would be used. The opposite effect should occur in the poor performance conditions. Since unsuccessful performance would be expected in a female manager, her performance would be attributed to lack of ability; whereas, since unsuccessful performance would be unexpected in a male manager, attribution of lack of effort or bad luck would be cited.

The research showed some support for the effect of expectations on attributions, but mainly by the male managers. The male managers attributed the poor performance of the female to lack of ability and the poor performance of the male to bad luck, while attributing the success of the female to effort. The female managers did not attribute differently according to the sex of the applicant and the level of performance. The fact that the male managers tended to attribute causes according to sex-role expectations is important to the implications of the study for women in management since most managers are male (Women's Bureau, Note 1).

The students also generally supported the hypothesis concerning expectations and attribution. Both male and female students attributed lack of effort to the unsuccessful male more than to the unsuccessful female. There were some sex differences in attribution for the students, but the pattern was more mixed than the managers. The female students attributed the female's unknown performance more to effort than for male's performance while the males attributed the successful female's performance more to effort than for the male's performance. Males also attributed the male's unsuccessful performance more to bad luck than for the female's unsuccessful performance.

Close examination of the pattern of the results regarding expectations and attribution shows that the hypothesized directions of attribution are generally found more for unsuccessful performance rather than successful performance, and by male evaluators rather than female evaluators. Other research has also shown that males' attributions are more affected by expectations of behavior than attributions by females (Feldman-Summer & Kiesler, 1974; Lips & Myers, 1980; Stevens & DeNisi, 1980; Taynor & Deaux, 1975). Perhaps females are less likely to use stereotypes in their perceptions of males and females because they are more sensitive to the issue.

Scores on the WAMS were not related to causal attributions of performance. Subjects with high scores did not attribute the female manager's success to ability and effort more than subjects with low scores. This finding is contrary to the studies by Garland and Price (1977) and Stevens and DeNisi (1980) who found that the WAMS scores of the male subjects were related to attribution of causes. Although Garland and Price used only male subjects, Stevens and DeNisi found a different pattern for their female subjects. There was no relationship between the WAMS scores of the female subjects and the pattern of causal attribution. The results for the female subjects do not support the lack of relationship found in the present study.

One explanation for the pattern of attribution not relating to the WAMS scores is the amount of information about the applicant available to the subjects. In the studies that found a relationship between these two variables (Garland & Price, 1977; Stevens & DeNisi, 1980; Terborg & Ilgen, 1975), the subjects made attributions of behavior from minimal information. For example, in the studies by Garland and Price

(1977) and Stevens and DeNisi (1980) the subjects were given three descriptive sentences about the stimulus person. The subjects, in this study, were given much more information than the subjects in the other studies and so did not rely upon their generalized attitudes in making attributions.

Implications

The study was successful in that it added to our understanding of conflicting research in the area of sex bias in evaluations. The research study pointed out the complicated effects of gender on the performance evaluations of managers. A simplistic pattern does not exist, as some researchers hypothesize, of males being evaluated more positively than females for the same performance. The sex of the person being evaluated is only one item of information that is considered along with many others, such as the job or task and the level of performance. Subjects tend to use whatever information they are given in their evaluations of a stimulus person. If they are given only the sex of the person, they use that. If they are given the sex and attractiveness of the person, they use that information. When given the sex of the manager and the sex of the subordinates, subjects base their evaluations on that information. Since research studies in the area vary in what information is given to the subjects, a variety of results should be expected. Only when many kinds of information are in the same study does the relationship between the variables become apparent. In this study the level of performance variable was more critical to the evaluations than the sex of the applicant or the sex of the evaluator, although both were important as they related to

the level of performance. This finding illustrates the role of the sex of the stimulus person. Instead of being the determining factor in evaluations, it is only one item of information to be considered in context with other information.

One particular variable affecting the pattern of results that is of great importance is the subject population. Many studies in the area used students as their subjects and generalized to managers. The results of this study question that generalization. Students do not evaluate applicants in the same way as managers do. Not only are student evaluations generally more favorable, their evaluations are also more influenced by the sex of the stimulus person and the sex of the evaluator. Consequently, students should not be used in the place of managers as subjects. Population differences must be considered.

Beyond the research area, the study adds understanding to the problem of external barriers for women in management. External barriers are obstacles in the environment such as the attitudes of peers and superiors that prevent women from advancing in management. The two external barriers examined in the present study were evaluations of managerial performance and perceived causes of behavior (or causal attribution). The results of the study suggest that being a female manager by itself does not affect evaluations but may play a role in the evaluation process. The femaleness of a manager seems to affect more directly the perceived causes of behavior. The success of a woman manager is seen as the result of effort while a man's success is attributed to ability. This difference in the perceived cause of the performance is very important. The attributed cause is an indication of the perception of the performance's stability. Ability is a very

stable attribute while effort is more variable and temporary and can be more influenced by extraneous factors. When a manager is being considered for promotion, ability is more important than hard-working. According to Heilman and Guzzo (1978), perceived causes of behavior are related to the allocation of organizational rewards such as promotions and raises. Women, because their success is assumed to be the result of effort rather than ability, are bypassed when organization rewards are distributed. In summary, the fact that a manager is female does not directly affect evaluations of her performance but does affect perceived causes of her performance. The perceived causes, according to Heilman and Guzzo, then affect the treatment of the female manager.

When considering the implications of the study for women in management, one should keep in mind that the study is a simulated version of the evaluation process that occurs in the business world. The study is more valuable than many of the other studies in the field because managers were used as subjects, and the effect of many types of data are examined. It still does not contain the multitude of information available in actual evaluations.

Conclusions about the study are also limited by the assumption of sex-role congruence for males and sex-role incongruence for females. There is a possibility that the job of bank branch manager is not incongruent for females which suggests that the pattern of results might be different when a position that is more sex-role incongruent for females is used. Further research in the area should consider the sex-role congruence variable more closely.

Research is also needed into the effect of minimal information (or a high level of required inference) on evaluations of performance.

As was stated before, this particular amount of information was unexpectantly not tested. Further study is needed to determine whether males are, in fact, evaluated more positively than females for equal performance on a masculine task when only minimal information is known.

A final suggestion for future research is to use managers as subjects when attempting to learn about the process of managerial evaluation. The results of this study point out differences between managers as subjects and students as subjects. One cannot reliably generalize from students to managers.

In summary, the study has some important implications for the research area of sex bias in the evaluation of managers. The study helps explain the conflicting research in the area by concluding that evaluations are affected by a number of variables through a complicated process. Of special significance to the research area is the finding that the subject population is a major variable in the evaluation process. The study also gives understanding of two external barriers for women in management: evaluations of managerial performance and perceived causes of performance. Specifically, the sex of the manager has little effect on the evaluations but does seem to affect perceived causes of performance. Suggestions for future research include examining sex-role congruence and the effect of minimal information on evaluations, and using managers as subjects.

APPENDIX A
INSTRUCTION AND DEMOGRAPHIC DATA SHEET FOR MANAGERS

Enclosed are the following items:

1. Career Opportunities Application
2. Performance Criteria for Assistant Branch Manager
3. Performance Rating Scale

After answering some question about yourself, you will be reviewing some materials about a person who is currently an assistant branch manager and would like to be promoted to branch manager. The branch bank in question, Greenbriar Branch, is a small consumer oriented branch with ten employees and $6 million in deposits. First you will read the assistant branch manager's application for branch manager and then you will read the performance criteria for the assistant branch manager's present job. Finally you will be asked to give your first impressions of the assistant branch manager.

Please complete the packet in the order presented.

Thank you for participating.

DEMOGRAPHIC INFORMATION

Please complete the following information about yourself:

Sex: M F (Circle one)

Age: _____

Total Years of Work Experience in Career: _____

Total Years of Managerial Experience in Career: _____

Present Position: _____

Please turn the page and read the Career Opportunities Application.

APPENDIX B
INSTRUCTION AND DEMOGRAPHIC DATA SHEET FOR STUDENTS

Enclosed are the following items:

1. Career Opportunities Application
2. Performance Criteria for Assistant Branch Manager
3. Performance Rating Scale
4. Attitudes Questionnaire

After answering some questions about yourself, you will be reviewing some materials about a person who is currently an assistant branch manager and would like to be promoted to branch manager. The branch bank in question, Greenbriar Branch, is a small consumer oriented branch with ten employees and $6 million in deposits. First you will read the assistant branch manager's application for branch manager and then you will read the performance criteria for the assistant branch manager's present job. Finally you will be asked to give your first impressions of the assistant branch manager and complete the attitudes questionnaire.

Please complete the packet in the order presented.

Thank you for participating.

DEMOGRAPHIC INFORMATION

Please complete the following information about yourself:

Sex: M F (Circle one)

Age: _____

Total Years of Work Experience in Career: _____

Total Years of Managerial Experience in Career: _____

Present Position: _____

Please turn the page and read the Career Opportunities Application.

APPENDIX C
CAREER OPPORTUNITIES APPLICATION FOR ELLEN TURNER

MID CITY BANK

CAREER OPPORTUNITIES APPLICATION

Applying For: Branch Manager, Greenbriar Branch

Posted Position No. 238

APPLICATION INFORMATION

Name Ellen Turner

Present Job Title Asst. Branch Manager

Bank/ Subsidiary Greenbriar Branch

Telephone Extension 365

List Your Experience And Skills Which Qualify You For This Job

Graduated with B.A. in Business Administration/Finance, University of Florida, 1977

Management Trainee, Mid City Bank, Dec. 1977 - Oct. 1979
Rotations through: Customer Service, Installment Loans, Commerical Loans

Asst. Branch Manager, Greenbriar Branch, Oct. 1979 to present
Experience in customer service, loans, new accounts

Explain Why You Are Interested In This Job

I believe I have learned the job of asst. branch manager and am ready to be promoted to the next step in management. The responsibilities of being branch manager are very familiar to me since I have been assistant branch manager for over a year. Since I am interested in moving ahead in the banking industry and also enjoy contact with the public, being a branch manager is ideal.

Ellen Turner
Signature of Applicant

11/15/81
Date

APPENDIX D
CAREER OPPORTUNITIES APPLICATION FOR CHARLES TURNER

MID CITY BANK

CAREER OPPORTUNITIES APPLICATION

Applying For: Branch Manager, Greenbriar Branch

Posted Position No. 238

APPLICATION INFORMATION

Name Charles Turner

Present Job Title Asst. Branch Manager

Bank/ Subsidiary Greenbriar Branch

Telephone Extension 365

List Your Experience And Skills Which Qualify You For This Job

Graduated with B.A. in Business Administration/Finance, University of Florida, 1977

Management Trainee, Mid City Bank, Dec. 1977 - Oct. 1979
Rotations through: Customer Service, Installment Loans, Commerical Loans

Asst. Branch Manager, Greenbriar Branch, Oct. 1979 to present
Experience in customer service, loans, new accounts

Explain Why You Are Interested In This Job

I believe I have learned the job of asst. branch manager and am ready to be promoted to the next step in management. The responsibilities of being branch manager are very familiar to me since I have been assistant branch manager for over a year. Since I am interested in moving ahead in the banking industry and also enjoy contact with the public, being a branch manager is ideal.

Charles Turner
*Signature of Applicant

11/5/81
Date

APPENDIX E
PERFORMANCE CRITERIA FOR ELLEN TURNER,
NO EVALUATION CONDITION

MID CITY BANK

PERFORMANCE CRITERIA FOR ASSISTANT BRANCH MANAGER

Name: Ellen Turner

Bank/
Subsidiary: Greenbriar Branch

Date in
Present Position: Oct. 1979

1. MANAGEMENT SKILLS

Assists in the supervision of a full service bank. Assumes responsibility for a portion of the routine operations. Assists the branch manager in any way needed. Must be mature and responsible, able to work well under pressure.

Appraisal Factors:

1. Organization. Ability to set priorities and plan efficiently.

2. Effectiveness. Includes ability to persuade others to act and ability to perform well under stress.

3. Overall Job Knowledge. Knowledge of background subjects and related procedures.

2. CUSTOMER SERVICES

Insures that all customer services are provided such as customer inquiries and problems. Acts as a liaison between the bank and all customers. Sells bank services.

Appraisal Factors:

1. Customer Contact. Includes ability to courteously help customers and maintain rapport.

2. Customer Expansion. Ability to sell bank services and seek prospective customers.

3. Communication Skills. Ability to communicate effectively and tactfully with customers and co-workers over the telephone, person to person, and in writing.

3. BANKING SKILLS

Must be familiar with overdrafts and charging off of same, installment and commercial loans and preparation of loan documents. Must know savings service activities including researching and preparing out-of-balance savings statements. Knows correct use of machines and equipment.

Appraisal Factors:

1. Quality and Quantity of Work. Amount of work produced, speed in which tasks are accomplished, and accuracy and completeness of finished work.

2. Application. Ability to apply one's self to work and initiative demonstrated in keeping productively occupied.

4. WORK HABITS AND PERSONAL DEVELOPMENT

Must have good personal habits, positive attitude, enthusiasm and cooperation in work. Interested in professional development.

Appraisal Factors:

1. Personal. Includes neatness and decorum, ability to follow bank and safety rules, and amount of absenteeism.

2. Attitude. Response to supervision, contribution to morale, and willingness to assist others.

3. Development. Interest and success in further training including outside education.

APPENDIX F
PERFORMANCE CRITERIA FOR ELLEN TURNER,
EXCELLENT EVALUATION CONDITION

MID CITY BANK

PERFORMANCE CRITERIA FOR ASSISTANT BRANCH MANAGER

Name: Ellen Turner Date: Oct. 1980

Bank/
Subsidiary: Greenbriar Branch Date in
Present Position: Oct. 1979

Rating Standards

5-Clearly exceptional performance in every respect. Will be achieved only by a few.

4-Performs well beyond normal requirements and outstanding in some respects.

3-Fulfills normal requirements well, has some strong points.

2-Performance is below normal requirements. Meets minimum standards, but improvement is needed to be described satisfactory.

1-Performance is generally unsatisfactory. Considerable improvement is needed to reach acceptable standards of performance.

1. MANAGEMENT SKILLS
Assists in the supervision of a full service bank. Assumes responsibility for a portion of the routine operations. Assists the branch manager in any way needed. Must be mature and responsible, able to work well under pressure.

Appraisal Factors:	Rating:
1. Organization. Ability to set priorities and plan efficiently.	4

2. Effectiveness. Includes ability to persuade others to act and ability to perform well under stress. 3

3. Overall Job Knowledge. Knowledge of background subjects and related procedures. 5

2. CUSTOMER SERVICES

Insures that all customer services are provided such as customer inquiries and problems. Acts as a liaison between the bank and all customers. Sells bank services.

Appraisal Factors:

1. Customer Contact. Includes ability to courteously help customers and maintain rapport. 4

2. Customer Expansion. Ability to sell bank services and seek prospective customers. 5

3. Communication Skills. Ability to communicate effectively and tactfully with customers and co-workers over the telephone, person to person, and in writing. 3

3. BANKING SKILLS

Must be familiar with overdrafts and charging off of same, installment and commercial loans and preparation of loan documents. Must know savings service activities including researching and preparing out-of-balance savings statements. Knows correct use of machines and equipment.

Appraisal Factors:

1. Quality and Quantity of Work. Amount of work produced, speed in which tasks are accomplished, and accuracy and completeness of finished work. 4

2. Application. Ability to apply one's self to work and initiative demonstrated in keeping productively occupied. 4

4. WORK HABITS AND PERSONAL DEVELOPMENT

Must have good personal habits, positive attitude, enthusiasm and cooperation in work. Interested in professional development.

Appraisal Factors:

1. Personal. Includes neatness and decorum, ability to follow bank and safety rules, and amount of absenteeism. 4

2. Attitude. Response to supervision, contribution to morale, and willingness to assist others. 5

3. Development. Interest and success in further training including outside education. 4

EMPLOYEE'S OVERALL RATING: 4

APPENDIX G
PERFORMANCE CRITERIA FOR ELLEN TURNER,
POOR EVALUATION CONDITION

MID CITY BANK

PERFORMANCE CRITERIA FOR ASSISTANT BRANCH MANAGER

Name: Ellen Turner Date: Oct. 1980

Bank/
Subsidiary: Greenbriar Branch Date in
Present Position: Oct. 1979

Rating Standards

5-Clearly exceptional performance in every respect. Will be achieved only by a few.

4-Performs well beyond normal requirements and outstanding in some respects.

3-Fulfills normal requirements well, has some strong points.

2-Performance is below normal requirements. Meets minimum standards, but improvement is needed to be described satisfactory.

1-Performance is generally unsatisfactory. Considerable improvement is needed to reach acceptable standards of performance.

1. MANAGEMENT SKILLS
Assists in the supervision of a full service bank. Assumes responsibility for a portion of the routine operations. Assists the branch manager in any way needed. Must be mature and responsible, able to work well under pressure.

Appraisal Factors:	Rating:
1. Organization. Ability to set priorities and plan efficiently.	2

2. Effectiveness. Includes ability to persuade others to act and ability to perform well under stress. 3

3. Overall Job Knowledge. Knowledge of background subjects and related procedures. 1

2. CUSTOMER SERVICES

Insures that all customer services are provided such as customer inquiries and problems. Acts as a liaison between the bank and all customers. Sells bank services.

Appraisal Factors:

1. Customer Contact. Includes ability to courteously help customers and maintain rapport. 2

2. Customer Expansion. Ability to sell bank services and seek prospective customers. 1

3. Communication Skills. Ability to communicate effectively and tactfully with customers and co-workers over the telephone, person to person, and in writing. 3

3. BANKING SKILLS

Must be familiar with overdrafts and charging off of same, installment and commercial loans and preparation of loan documents. Must know savings service activities including researching and preparing out-of-balance savings statements. Knows correct use of machines and equipment.

Appraisal Factors:

1. Quality and Quantity of Work. Amount of work produced, speed in which tasks are accomplished, and accuracy and completeness of finished work. 2

2. Application. Ability to apply one's self to work and initiative demonstrated in keeping productively occupied. 2

4. WORK HABITS AND PERSONAL DEVELOPMENT

Must have good personal habits, postive attitude, enthusiasm and cooperation in work. Interested in professional development.

Appraisal Factors:

1. Personal. Includes neatness and decorum, ability to follow bank and safety rules, and amount of absenteeism. 2

2. Attitude. Response to supervision, contribution to morale, and willingness to assist others. 1

3. Development. Interest and success in further training including outside education. 2

EMPLOYEE'S OVERALL RATING: 2

APPENDIX H
PERFORMANCE CRITERIA FOR CHARLES TURNER,
NO EVALUATION CONDITION

MID CITY BANK

PERFORMANCE CRITERIA FOR ASSISTANT BRANCH MANAGER

Name: Charles Turner

Bank/
Subsidiary: Greenbriar Branch

Date in
Present Position: Oct. 1979

---

1. MANAGEMENT SKILLS

Assists in the supervision of a full service bank. Assumes responsibility for a portion of the routine operations. Assists the branch manager in any way needed. Must be mature and responsible, able to work well under pressure.

Appraisal Factors:

1. Organization. Ability to set priorities and plan efficiently.

2. Effectiveness. Includes ability to persuade others to act and ability to perform well under stress.

3. Overall Job Knowledge. Knowledge of background subjects and related procedures.

2. CUSTOMER SERVICES

Insures that all customer services are provided such as customer inquiries and problems. Acts as a liaison between the bank and all customers. Sells bank services.

Appraisal Factors:

1. Customer Contact. Includes ability to courteously help customers and maintain rapport.

2. Customer Expansion. Ability to sell bank services and seek prospective customers.

3. Communication Skills. Ability to communicate effectively and tactfully with customers and co-workers over the telephone, person to person, and in writing.

3. BANKING SKILLS

Must be familiar with overdrafts and charging off of same, installment and commercial loans and preparation of loan documents. Must know savings service activities including researching and preparing out-of-balance savings statements. Knows correct use of machines and equipment.

Appraisal Factors:

1. Quality and Quantity of Work. Amount of work produced, speed in which tasks are accomplished, and accuracy and completeness of finished work.

2. Application. Ability to apply one's self to work and initiative demonstrated in keeping productively occupied.

4. WORK HABITS AND PERSONAL DEVELOPMENT

Must have good personal habits, positive attitude, enthusiasm and cooperation in work. Interested in professional development.

Appraisal Factors:

1. Personal. Includes neatness and decorum, ability to follow bank and safety rules, and amount of absenteeism.

2. Attitude. Response to supervision, contribution to morale, and willingness to assist others.

3. Development. Interest and success in further training including outside education.

APPENDIX I
PERFORMANCE CRITERIA FOR CHARLES TURNER,
EXCELLENT EVALUATION CONDITION

MID CITY BANK

PERFORMANCE CRITERIA FOR ASSISTANT BRANCH MANAGER

Name: Charles Turner Date: Oct. 1980

Bank/
Subsidiary: Greenbriar Branch Date in
Present Position: Oct. 1979

Rating Standards

5-Clearly exceptional performance in every respect. Will be achieved only by a few.

4-Performs well beyond normal requirements and outstanding in some respects.

3-Fulfills normal requirements well, has some strong points.

2-Performance is below normal requirements. Meets minimum standards, but improvement is needed to be described satisfactory.

1-Performance is generally unsatisfactory. Considerable improvement is needed to reach acceptable standards of performance.

1. MANAGEMENT SKILLS
Assists in the supervision of a full service bank. Assumes responsibility for a portion of the routine operations. Assists the branch manager in any way needed. Must be mature and responsible, able to work well under pressure.

Appraisal Factors:	Rating:
1. Organization. Ability to set priorities and plan efficiently.	4

2. Effectiveness. Includes ability to persuade others to act and ability to perform well under stress. 3

3. Overall Job Knowledge. Knowledge of background subjects and related procedures. 5

2. CUSTOMER SERVICES

Insures that all customer services are provided such as customer inquiries and problems. Acts as a liaison between the bank and all customers. Sells bank services.

Appraisal Factors:

1. Customer Contact. Includes ability to courteously help customers and maintain rapport. 4

2. Customer Expansion. Ability to sell bank services and seek prospective customers. 5

3. Communication Skills. Ability to communicate effectively and tactfully with customers and co-workers over the telephone, person to person, and in writing. 3

3. BANKING SKILLS

Must be familiar with overdrafts and charging off of same, installment and commercial loans and preparation of loan documents. Must know savings service activities including researching and preparing out-of-balance savings statements. Knows correct use of machines and equipment.

Appraisal Factors:

1. Quality and Quantity of Work. Amount of work produced, speed in which tasks are accomplished, and accuracy and completeness of finished work. 4

2. Application. Ability to apply one's self to work and initiative demonstrated in keeping productively occupied. 4

4. WORK HABITS AND PERSONAL DEVELOPMENT

Must have good personal habits, positive attitude, enthusiasm and cooperation in work. Interested in professional development.

Appraisal Factors:

1. Personal. Includes neatness and decorum, ability to follow bank and safety rules, and amount of absenteeism. 4

2. Attitude. Response to supervision, contribution to morale, and willingness to assist others. 5

3. Development. Interest and success in further training including outside education. 4

EMPLOYEE'S OVERALL RATING: 4

APPENDIX J
PERFORMANCE CRITERIA FOR CHARLES TURNER,
POOR EVALUATION CONDITION

MID CITY BANK

PERFORMANCE CRITERIA FOR ASSISTANT BRANCH MANAGER

Name: Charles Turner Date: Oct. 1980

Bank/
Subsidiary: Greenbriar Branch Date in
Present Position: Oct. 1979

Rating Standards

5-Clearly exceptional performance in every respect. Will be achieved only by a few.

4-Performs well beyond normal requirements and outstanding in some respects.

3-Fulfills normal requirements well, has some strong points.

2-Performance is below normal requirements. Meets minimum standards, but improvement is needed to be described satisfactory.

1-Performance is generally unsatisfactory. Considerable improvement is needed to reach acceptable standards of performance

1. MANAGEMENT SKILLS
   Assists in the supervision of a full service bank. Assumes responsibility for a portion of the routine operations. Assists the branch manager in any way needed. Must be mature and responsible, able to work well under pressure.

Appraisal Factors:	Rating:
1. Organization. Ability to set priorities and plan efficiently.	2

2. Effectiveness. Includes ability to persuade others to act and ability to perform well under stress. 3

3. Overall Job Knowledge. Knowledge of background subjects and related procedures. 1

2. CUSTOMER SERVICES

Insures that all customer services are provided such as customer inquiries and problems. Acts as a liaison between the bank and all customers. Sells bank services.

Appraisal Factors:

1. Customer Contact. Includes ability to courteously help customers and maintain rapport. 2

2. Customer Expansion. Ability to sell bank services and seek prospective customers. 1

3. Communication Skills. Ability to communicate effectively and tactfully with customers and co-workers over the telephone, person to person, and in writing. 3

3. BANKING SKILLS

Must be familiar with overdrafts and charging off of same, installment and commercial loans and preparation of loan documents. Must know savings service activities including researching and preparing out-of-balance savings statements. Knows correct use of machines and equipment.

Appraisal Factors:

1. Quality and Quantity of Work. Amount of work produced, speed in which tasks are accomplished, and accuracy and completeness of finished work. 2

2. Application. Ability to apply one's self to work and initiative demonstrated in keeping productively occupied. 2

4. WORK HABITS AND PERSONAL DEVELOPMENT

Must have good personal habits, positive attitude, enthusiasm and cooperation in work. Interested in professional development.

Appraisal Factors:

1. Personal. Includes neatness and decorum, ability to follow bank and safety rules, and amount of absenteeism. 2

2. Attitude. Response to supervision, contribution to morale, and willingness to assist others. 1

3. Development. Interest and success in further training including outside education. 2

EMPLOYEE'S OVERALL RATING: 2

APPENDIX K
PERFORMANCE RATING SCALE

You have just read some materials about an individual. Please give your impressions of this person on each of the following items by marking through the point that best describes your opinion. There are no right or wrong answers. Please answer all questions with your first impressions.

1. How interested in the position of branch manager would you say this person is?

```
     .....................................................
     1        2        3        4        5        6
Not at all                                    Extremely
```

2. How much job related experience and training does this person have?

```
     .....................................................
     1        2        3        4        5        6
Not very much                                 A great deal
```

3. How knowledgeable of the occupational area do you think this person is?

```
     .....................................................
     1        2        3        4        5        6
Not at all                                    Extremely
```

4. How much ability does the person have?

```
     .....................................................
     1        2        3        4        5        6
Not very much                                 A great deal
```

5. How motivated do you think this person is?

```
     .....................................................
     1        2        3        4        5        6
Not at all                                    Extremely
```

6. How lucky do you think this person is?

```
.....
1        2        3        4        5        6
Not at all                                  Extremely
```

7. How easy do you think the job of assistant branch manager is?

```
.....
1        2        3        4        5        6
Very difficult                              Very easy
```

8. What hiring decisions would you recommend?

```
.....
1        2        3        4        5        6
Definitely do                               Definitetly
not hire                                    do hire
```

9. How accepted by the co-workers would this person be as branch manager?

```
.....
1        2        3        4        5        6
Not at all                                  Extremely
```

10. How satisfied do you think this person would be as branch manager?

```
.....
1        2        3        4        5        6
Not at all                                  Extremely
```

11. How successful would you predict this person to be in the future?

```
.....
1        2        3        4        5        6
Not at all                                  Extremely
```

12. What is the probability of further promotion in the future?

```
.....
1        2        3        4        5        6
Definitely will                             Definitely will
not be promoted                             be promoted
```

When we judge a person's performance at a certain job or task, we usually think about what caused or contributed to the performance. Four factors usually considered as causes are ability, effort, luck, and nature of job (easy or difficult). For example, when a football team becomes the national champions, some people attribute the championship to the team's playing ability while some others may say the team just had a lot of luck. When a child fails a course in school, one parent may say the child failed because the course was too difficult, but the other parent may say the child did not try hard enough. Each type of performance can be caused by several factors and people have different ideas about which factors were most important.

How important do you think each of these factors were to the person's performance as assistant branch manager? Please answer with your first impression.

13. How important was the person's level of ability?

```
     .....................................................
     1        2        3        4        5        6
Not at all                                      Extremely
```

14. How important was the person's amount of effort?

```
     .....................................................
     1        2        3        4        5        6
Not at all                                      Extremely
```

15. How important was the person's type of luck?

```
     .....................................................
     1        2        3        4        5        6
Not at all                                      Extremely
```

16. How important was the nature of the job (easy or difficult)?

```
     .....................................................
     1        2        3        4        5        6
Not at all                                      Extremely
```

APPENDIX L
WOMEN AS MANAGERS SCALE

Instructions: The following items are an attempt to assess the attitudes people have about women in business. The best answer to each statement is your personal opinion. The statements cover many different and opposing points of view; you may find yourself agreeing strongly with some of the statements, disagreeing just as strongly with others, and perhaps uncertain about others. Whether you agree or disagree with any statement, you can be sure that many people feel the same way you do.

Using the numbers from 1 to 7 on the rating scale given below, mark your personal opinion about each statement in the blank that immediately precedes it. Remember, give your personal opinion according to how much you agree or disagree with each item. Please respond to all 21 items. Thank you.

RATING SCALE
1 = Strongly Disagree
2 = Disagree
3 = Slightly Disagree
4 = Neither Disagree nor Agree
5 = Slightly Agree
6 = Agree
7 = Strongly Agree

_____ 1. It is less desirable for women than men to have a job that requires responsibility.

_____ 2. Women have the objectivity required to evaluate business situations properly.

_____ 3. Challenging work is more important to men that it is to women.

_____ 4. Men and women should be given equal opportunity for participation in management training programs.

_____ 5. Women have the capability to acquire the necessary skills to be successful managers.

_____ 6. On the average, women managers are less capable of contributing to an organization's overall goals than are men.

_____ 7. It is not acceptable for women to assume leadership roles as often as men.

_____ 8. The business community should someday accept women in key managerial positions.

_____ 9. Society should regard work by female managers as valuable as work by male managers.

_____10. It is acceptable for women to compete with men for top executive positions.

_____11. The possibility of pregnancy does not make women less desirable employees than men.

_____12. Women would no more allow their emotions to influence their managerial behavior than would men.

_____13. Problems associated with menstruation should not make women less desirable than men as employees.

_____14. To be a successful executive, a woman does not have to sacrifice some of her femininity.

_____15. On the average, a woman who stays at home all the time with her children is a better mother than a woman who works outside the home at least half-time.

_____16. Women are less capable of learning mathematical and mechanical skills than are men.

_____17. Women are not ambitious enough to be successful in the business world.

_____18. Women cannot be assertive in business situations that demand it.

_____19. Women possess the self-confidence required of a good leader.

_____20. Women are not competitive enough to be successful in the business world.

_____21. Women cannot be aggressive in business situations that demand it.

APPENDIX M
PILOT STUDY FEEDBACK QUESTIONNAIRE

Without looking back at the materials, please answer the following questions.

1. What was the sex of the person applying for the job?_____

2. What was the person's present job?_____

3. For what position was the person applying?_____

Please give your opinion on the following questions relating to the experimental procedure. I would appreciate any suggestions for improving the materials. You may look back at the materials at this point.

4. How clear were the instructions? If you had any questions about what was expected of you that were not answered in the instructions, pleas comment.

```
     .....................................
     1     2     3     4     5     6
Not at all                       Extremely
```

Suggestions:_____

_____

5. How clear were the questions on the Demographic Information Sheet as to what was being requested?

```
     .....................................
     1     2     3     4     5     6
Not at all                       Extremely
```

Suggestions:_____

_____

6. How clear was the explanation of the four possible causes of behavior?

```
     .....................................
     1     2     3     4     5     6
Not at all                       Extremely
```

Suggestions:_____

_____

7. Please comment on the ease or difficulty of rating the four causes of behavior.

```
.....
1    2    3    4    5    6
Extremely easy              Extremely
                            difficult
```

Suggestions:_____

_____

8. Was the Career Opportunities Application believable as an example of those found in the banking industry? Please consider style and length.

```
.....
1    2    3    4    5    6
Not at all                  Extremely
```

Suggestions:_____

_____

9. Were the responses by the applicant on the Career Opportunities Application typical of those found in banking?

```
.....
1    2    3    4    5    6
Not at all                  Extremely
```

Suggestions:_____

_____

10. Was the Performance Criteria believable as an example of those found in the banking industry? Please consider terminology, length, style, and job responsibilities.

```
.....
1    2    3    4    5    6
Not at all                  Extremely
```

Suggestions:_____

_____

11. Was there any information about the applicant you felt should have been included but was not? If so, what?_____

_____

12. What do you think is the purpose of the study?_____

_____

APPENDIX N
INFORMED CONSENT FOR MANAGERS

INFORMED CONSENT

This study involves reading information about a manager and giving your impressions of the manager. You will also be asked to complete an attitudes questionnaire at a later time. We are interested in the process of evaluating managers and the factors involved in this process.

Confidentiality will be insured by having your research packet coded by number rather than by your name. The data will then be analyzed with only code numbers in groups of packets. Your name and code number will be on a master list, available only to me, and will be destroyed after the data are collected and analyzed.

There will be no monetary compensation.

If you have any questions about the procedure, please feel free to contact me. If you find you cannot or do not wish to continue in the experiment, you may withdraw at any time.

I have read and I understand the procedure described above. I agree to participate in the procedure and I have received a copy of this description.

_____ _____

Subject Date

_____ _____

Date

B. C. Stephenson,
Principal Investigator
Psychology Department
University of Florida
Gainesville, FL 32611

APPENDIX O
INFORMED CONSENT FOR STUDENTS

INFORMED CONSENT

This study involves reading information about a manager and giving your impressions of the manager. You will also be asked to complete an attitudes questionnaire. We are interested in the process of evaluating managers and the factors involved in this process.

Confidentiality will be insured by having your research packet coded by number rather than by your name. The data will then be analyzed with only code numbers in groups of packets. Your name and code number will be on a master list, available only to me, and will be destroyed after the data are collected and analyzed.

There will be no monetary compensation.

If you have any questions about the procedure, please feel free to contact me. If you find you cannot or do not wish to continue in the experiment, you may withdraw at any time.

I have read and I understand the procedure described above. I agree to participate in the procedure and I have received a copy of this description.

_____ _____

Subject Date

_____ _____

M. J. Hooper, Date
Principal Investigator
Psychology Department
University of Florida
Gainesville, FL 32611

APPENDIX P
COVER LETTER FOR FIRST MAILING TO MANAGERS

January 28, 1981

I am a doctoral student in psychology currently working on my dissertation in the area of management evaluation and would like your help. I need bank managers, such as yourself, to complete the enclosed materials and then answer a short questionnaire at a later date. Your participation will enable me to examine the process of evaluating managers and hopefully make a supervisor's job a little easier in the future. I realize that you are probably very busy at the bank so I would appreciate if you would take a few minutes of your free time to complete the packet. Participating should only take 20 minutes.

Before completing the research materials, please read and sign the informed consent form. One copy is for you to keep and the other is to be returned with the other materials. For your convenience a stamped return envelope is enclosed. Please return by February 6, 1981. A short questionnaire will then be mailed to you.

Thank you for your time.

Sincerely,

B. C. Stephenson

Enclosures

APPENDIX Q
FOLLOW-UP POSTCARD TO MANAGERS

February 9, 1981

Dear Bank Manager,

If you have not yet had a chance to complete the research materials I sent you, there is still time for your packet to be included in the data analysis. Your participation is needed to insure a successful and useful study. I would very much appreciate your completing the packet and returning it to me as soon as possible.

If you have already returned your materials, thank you very much.

APPENDIX R
COVER LETTER FOR SECOND MAILING TO MANAGERS

February 9, 1981

Thank you for participating in my study. As I told you in my first letter, I would also like for you to complete a short questionnaire which is enclosed. Please return the questionnaire within one week. For your convenience a stamped return envelope is enclosed.

If you would like for information about my dissertation, please feel free to contact me.

Sincerely,

B. C. Stephenson

Enclosures

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BIOGRAPHICAL SKETCH

Beth Broadhurst Stephenson was born on January 26, 1953, in Tifton, Georgia. She lived most of her childhood in Warner Robins, Georgia, until she graduated from Warner Robins High School in 1971. Her college education began at Georgia Southern College before transferring to the University of Georgia where she received a Bachelor of Arts in psychology summa cum laude in 1975. After graduating from Georgia, Beth entered graduate school at the University of Florida to pursue studies in counseling psychology. She was awarded the Master of Arts in psychology in 1977 and since that time has continued to work toward achieving her doctorate.

Beth is the daughter of Mr. and Mrs. J. N. Childs of Warner Robins, Georgia. She lives with her daughter Julie in Gainesville, Florida.

I certify that I have read this study and that in my opinion it conforms to acceptable standards of scholarly presentation and is fully adequate, in scope and quality, as a dissertation for the degree of Doctor of Philosophy.

Dorothy D. Nevill, Chairperson
Associate Professor of Psychology

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Harry A. Grater, Jr.
Professor of Psychology

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Jaquelyn L. Resnick
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Merle E. Meyer
Professor of Psychology

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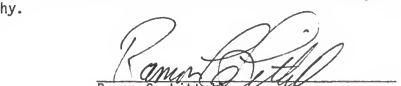

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This dissertation was submitted to the Graduate Faculty of the Department of Psychology in the College of Liberal Arts and Sciences and to the Graduate Council, and was accepted as partial fulfillment of the requirements for the degree of Doctor of Philosophy.

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